



Online Training

- **California Energy Commission**
 - **John Eash**
 - **Energy Specialist/Licensed Architect**
 - **9 + Years at the Commission**
 - **Developed the “Online Training Series” Videos**
 - **jeash@energy.state.ca.us or 916-653-7181**
 - **“Online Training Series”**
 - **State Funding and Private Sector Funding**
 - **More than 100 Training Videos Currently Online**
 - **www.energyvideos.com**



The Problem

- **Compliance & Enforcement**
 - **w/State Building Energy Codes**
 - **Lack of Understanding**
 - **Low Priority**
 - **States Have a Lack of “Power”**
 - **To Fund Training (“No Money!”)**
 - **To Change Attitudes about Energy Codes**
 - **Updated Codes**
 - **Legislative Mandates for Training**
 - **New Codes Require New Training**



The Solution

- **A National Online Information “Clearing House”**
 - **Provides Inexpensive – Cost Effective Training on SBEC**
 - **Informative**
 - **Entertaining**
 - **E-Learning/Distance Learning**
 - **Instructive Videos**



The Plan of Action

Partner Together for Efficiency

- 1. Make a Decision to Join the Effort**
- 2. Each State Designates a “Coordinator”**
- 3. Each State Analyzes Needs and Resources**
- 4. States Make Joint-Venture Proposal to DOE**
- 5. DOE Creates National “Clearing House” Web Site**
- 6. DOE Contracts with Production Company**



The Plan of Action

Partner Together for Efficiency

- 7. Production Company Also Obtains Private Sector Sponsors**
- 8. Create Innovative, Interactive E-Learning**
- 9. Provide “One-Shoot” Videos**
- 10. Coordinate Videos with Text, Web Casts & Other Tools**
- 11. Upload and Stream Videos**
- 12. Continual Edits and Changes**



Making It Fun!

- **Making it Easy**
 - **Video**
 - **Informative and Entertaining**
 - **Better Understanding**
 - **Fun**
 - **Better Compliance**
 - **Enhanced Compliance**
- **Similar to TV**



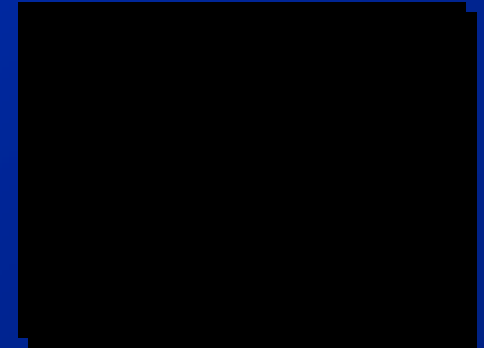
Online Training

- **More than 100,000,000 Americans use the Internet**
 - **Some use “Dial-up”**
 - **Increase in High Speed**
 - **T1, Cable Modem, DSL**
 - **30 Million People - Up 50% in 1 year!**



California Energy **Commission**

- ***Online Training Series***
 - **www.energyvideos.com**
 - **Available for Over a Year**
 - **Thousands of visitors**
 - **Streaming or Downloadable**





Online Training

- **California Energy Commission**
 - ***Energy Efficiency Standards for Residential and Nonresidential Buildings (AKA - “Title 24”)***
- **Building Departments Enforce**



Before

- **500 + Jurisdictions**
- **Training at Central Location**
 - **Paying for Instructors**
 - **Traveling “Dog & Pony Show”**
 - **20+ People Trained per Session**
 - **Many Could Not Make It**
 - **Lots of Paper (Handouts)**
 - **Not Cost Effective**



What Happened

- **1999 - Idea - Online Training**
- **2000/2001 - Steve Easley**
 - **+ iShow.com, D&R International**
 - **LP First - Radiant Barriers Videos**
- **2002 - Commission Contract**
 - **Work with Commission Attorneys**
 - **Contracts Office**



Issues

- **Copyright**
- **Licensing Agreement**
 - **Ownership under the Contract**
 - **Cannot use Government Staff**
 - **Re-purposing images/audio**
 - **Who Owns What**
- **Private Sponsors on Public Sites**



Text & Links

- **Text**
 - **Relevant Standard**
 - **FAQ's**
 - **Benefits**
 - **Contact Us**
- **Links**
 - **Resources - Online**



Videos

- **Videos – 107 Online Today**
 - **Each = 1 minute to 15 minutes long**
 - **HVAC**
 - **Insulation**
 - **Fenestration**
 - **Water Heating**
 - **Renewable Energy**
 - **More....**



Virtual Tour

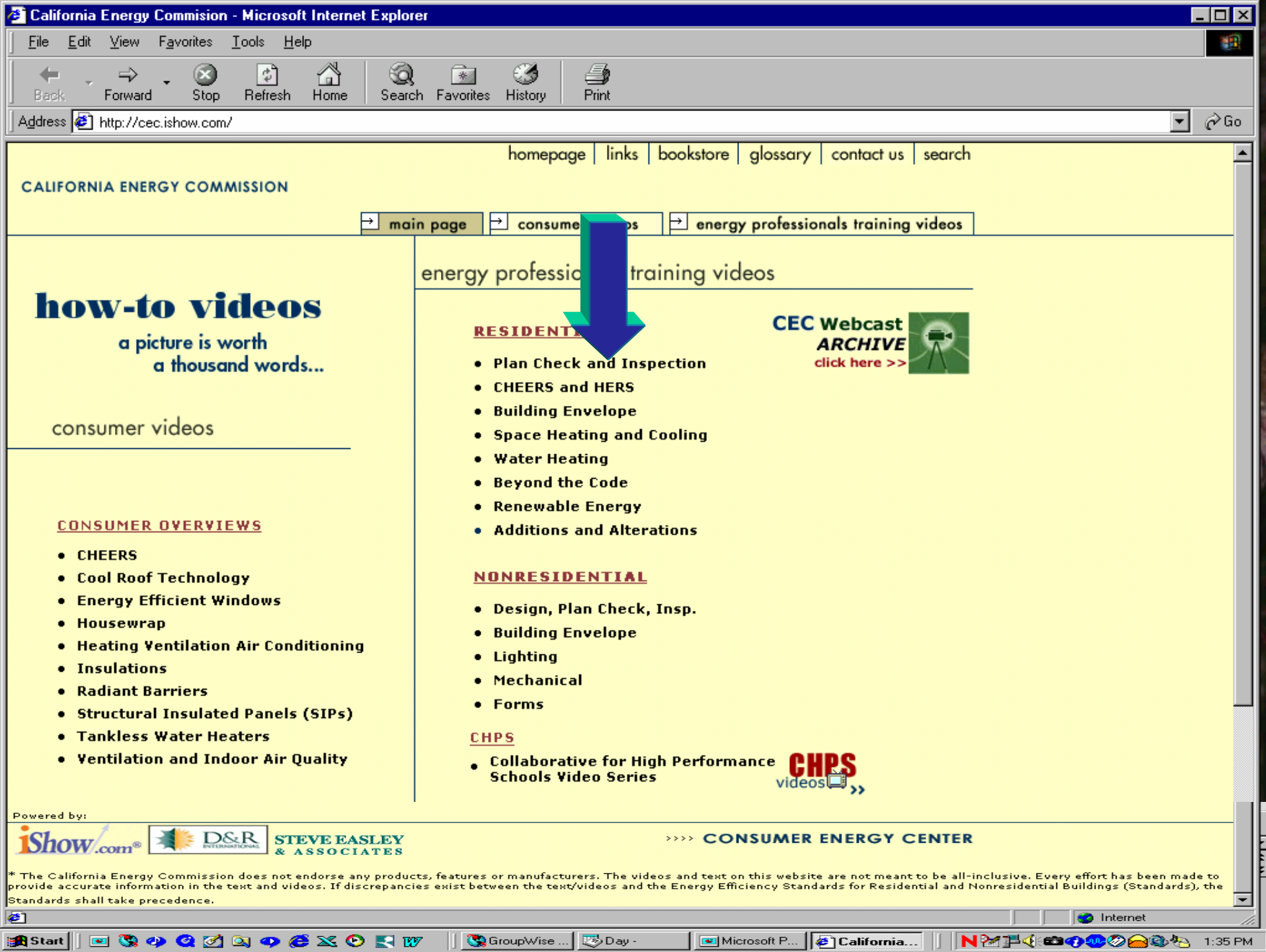
- **Videos**
- **Text Links**
- **Webcast**
- **CHPS**
 - **Note: The following Virtual Tour is not in the Live presentation but is provided here for your use.**



Text Links

www.energyvideos.com





how-to videos

a picture is worth
a thousand words...

consumer videos

CONSUMER OVERVIEWS

- CHEERS
- Cool Roof Technology
- Energy Efficient Windows
- Housewrap
- Heating Ventilation Air Conditioning
- Insulations
- Radiant Barriers
- Structural Insulated Panels (SIPs)
- Tankless Water Heaters
- Ventilation and Indoor Air Quality

RESIDENTIAL

- Plan Check and Inspection
- CHEERS and HERS
- Building Envelope
- Space Heating and Cooling
- Water Heating
- Beyond the Code
- Renewable Energy
- Additions and Alterations

CEC Webcast ARCHIVE



Plan Check
Inspection
CABEC
Certified Energy Analysts
Water Heating Inspection
Kitchen and Bath Lighting
Mandatory Measures



NONRESIDENTIAL

- Design, Plan Check, Insp.
- Building Envelope
- Lighting
- Mechanical
- Forms

CHPS

- Collaborative for High Performance Schools Video Series



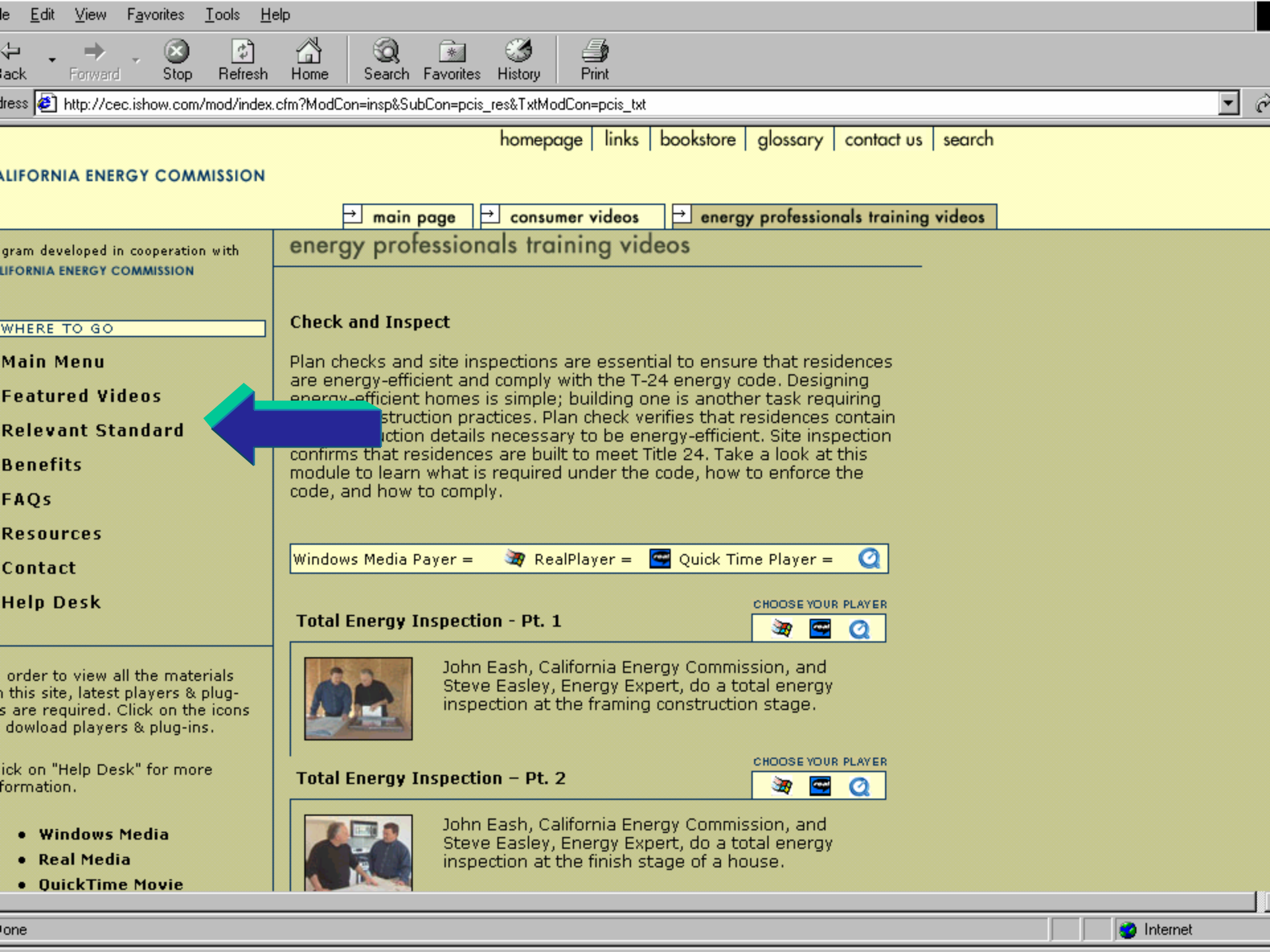
ered by:



STEVE EASLEY
& ASSOCIATES

>>>> CONSUMER ENERGY CENTER

The California Energy Commission does not endorse any products, features or manufacturers. The videos and text on this website are not meant to be all-inclusive. Every effort has been made to provide accurate information in the text and videos. If discrepancies exist between the text/videos and the Energy Efficiency Standards for Residential and Nonresidential Buildings (Standards), the Standards shall take precedence.



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Check and Inspect

Plan checks and site inspections are essential to ensure that residences are energy-efficient and comply with the T-24 energy code. Designing energy-efficient homes is simple; building one is another task requiring construction practices. Plan check verifies that residences contain construction details necessary to be energy-efficient. Site inspection confirms that residences are built to meet Title 24. Take a look at this module to learn what is required under the code, how to enforce the code, and how to comply.

Windows Media Payer = RealPlayer = Quick Time Player =

CHOOSE YOUR PLAYER

Total Energy Inspection - Pt. 1



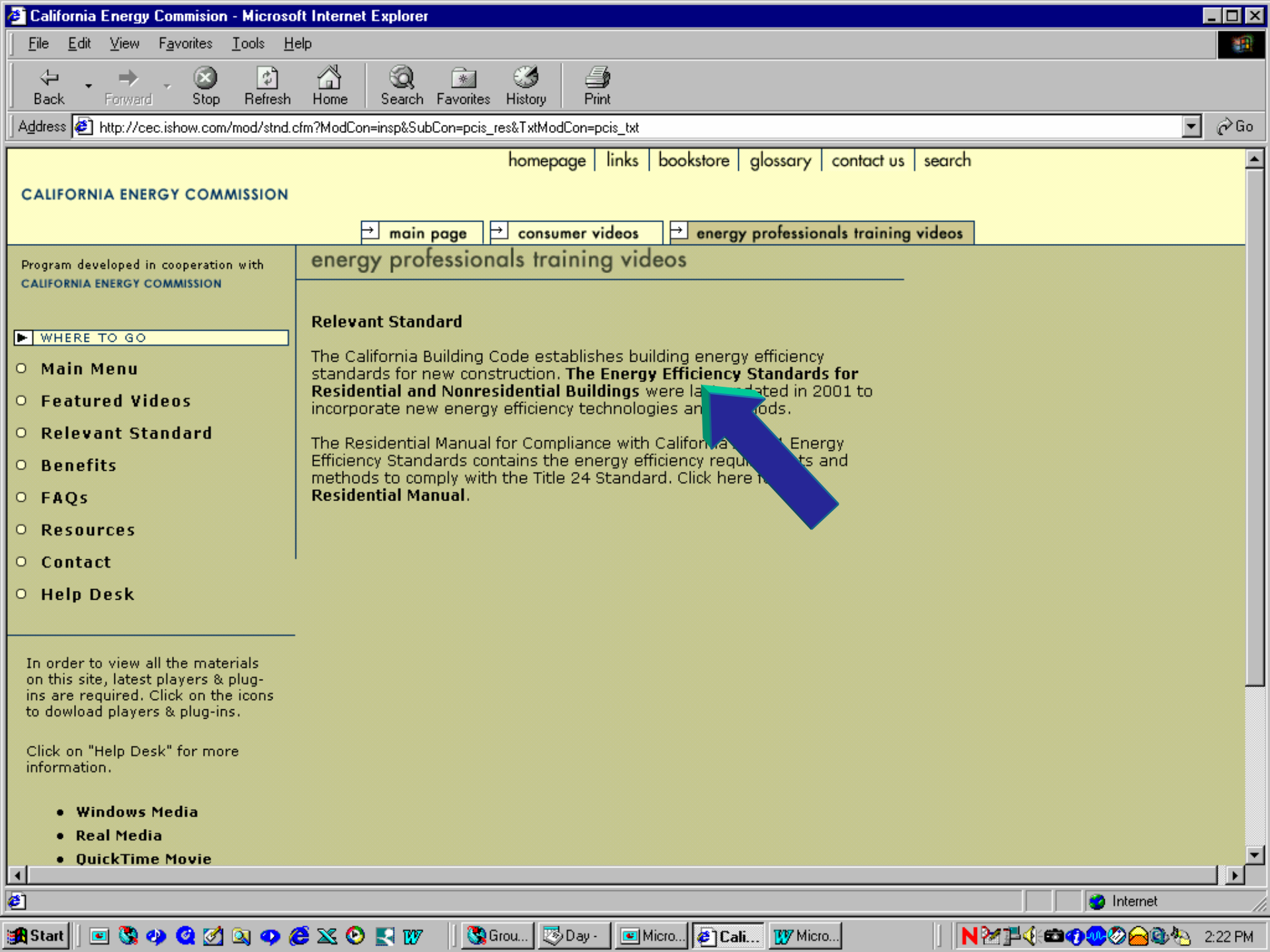
John Eash, California Energy Commission, and Steve Easley, Energy Expert, do a total energy inspection at the framing construction stage.

CHOOSE YOUR PLAYER

Total Energy Inspection - Pt. 2



John Eash, California Energy Commission, and Steve Easley, Energy Expert, do a total energy inspection at the finish stage of a house.



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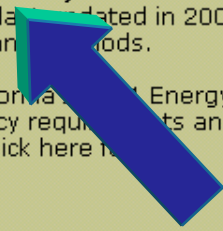
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Relevant Standard

The California Building Code establishes building energy efficiency standards for new construction. **The Energy Efficiency Standards for Residential and Nonresidential Buildings** were last updated in 2001 to incorporate new energy efficiency technologies and methods.

The Residential Manual for Compliance with California Title 24 Energy Efficiency Standards contains the energy efficiency requirements and methods to comply with the Title 24 Standard. Click here for the **Residential Manual**.



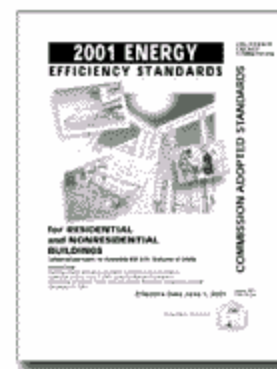
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Wednesday, May 7, 2003

Welcome to the *California*
Energy Commission**Related Links**[Residential Manual](#)[Non-Residential Manual](#)[Residential ACM](#)[Non-Residential ACM](#)[Title 24 Home](#)**Commission Links**[Commission Home](#)[Commission Info](#)[Key Topics](#)[Site Index](#)[Links](#)[Glossary](#)[Contact Us](#)[Title 24](#)[Efficiency Division](#)[Energy Quest for Kids](#)**Title 24, Part 6 *****California's
Energy Efficiency Standards for
Residential and Nonresidential Buildings**

The California Building Code establishes building energy efficiency standards for new construction (including requirements for entire new buildings, additions, alterations, and in nonresidential buildings, repairs). Since first established in 1977, the Building Energy Efficiency Standards (along with standards for energy efficiency in appliances) have helped Californians save more than \$11.3 billion in electricity and natural gas costs. The Standards are updated periodically to allow incorporation of new energy efficiency technologies and methods.

Printed copies of **Title 24, Part 6** (and associated administrative requirements in Part 1) are available from the Energy Commission's publications unit by calling: 916-654-5200. Questions about the energy standards should be addressed to the Commission's [Energy Efficiency Hot Line](#) by calling, 916-654-4058 or toll free in California 800-772-3300.



Copies of the Title 24 compliance forms for residential and nonresidential construction and the residential and nonresidential manual are also available on the website.

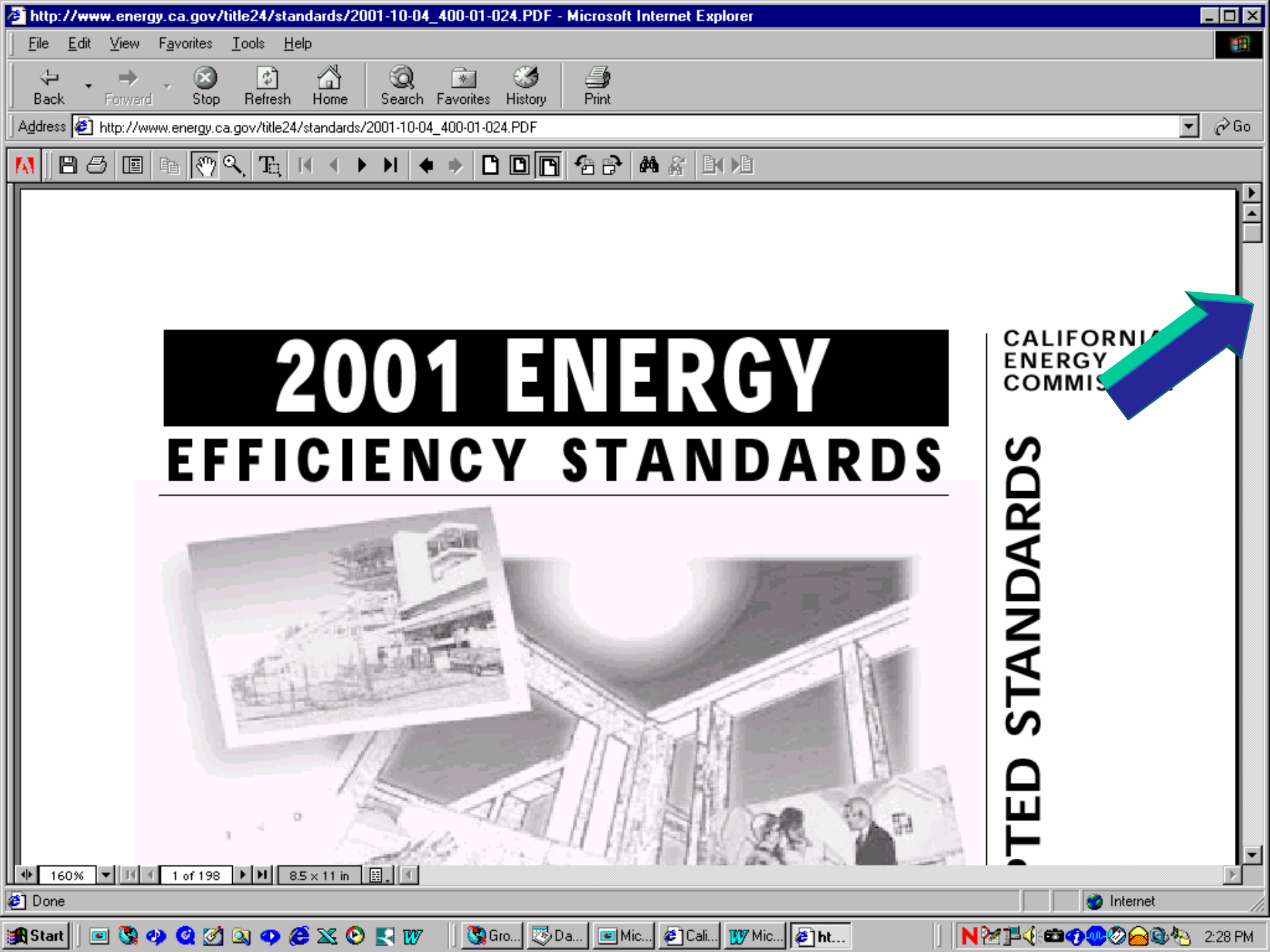


[Download Title 24, Part 6](#) -- Energy Efficiency Standards for Residential and Nonresidential Buildings
Publication Number: 400-01-024. August 2001.
([Adobe Acrobat](#) PDF file, 198 pages, 805 kilobytes)



Page Updated: 10/03/01

* Note: Title 24, Part 6 refers only to Part 6 of the California Building Standards Administrative Code, which deals only with efficiency standards for residential and nonresidential buildings. The other parts of Title 24 do not deal with efficiency

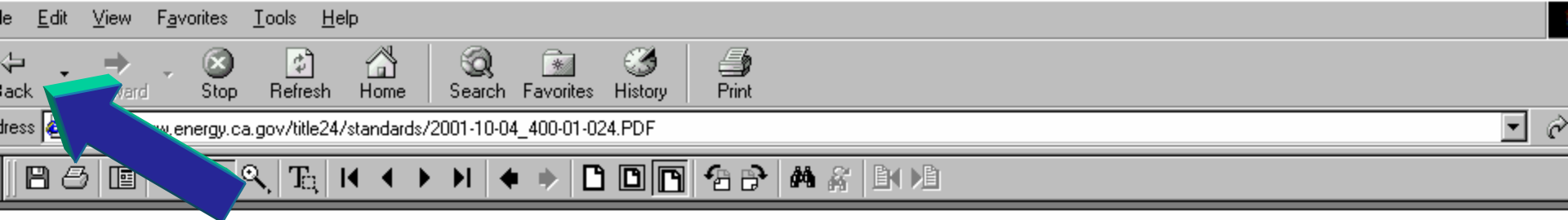


2001 ENERGY EFFICIENCY STANDARDS

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TED STANDARDS





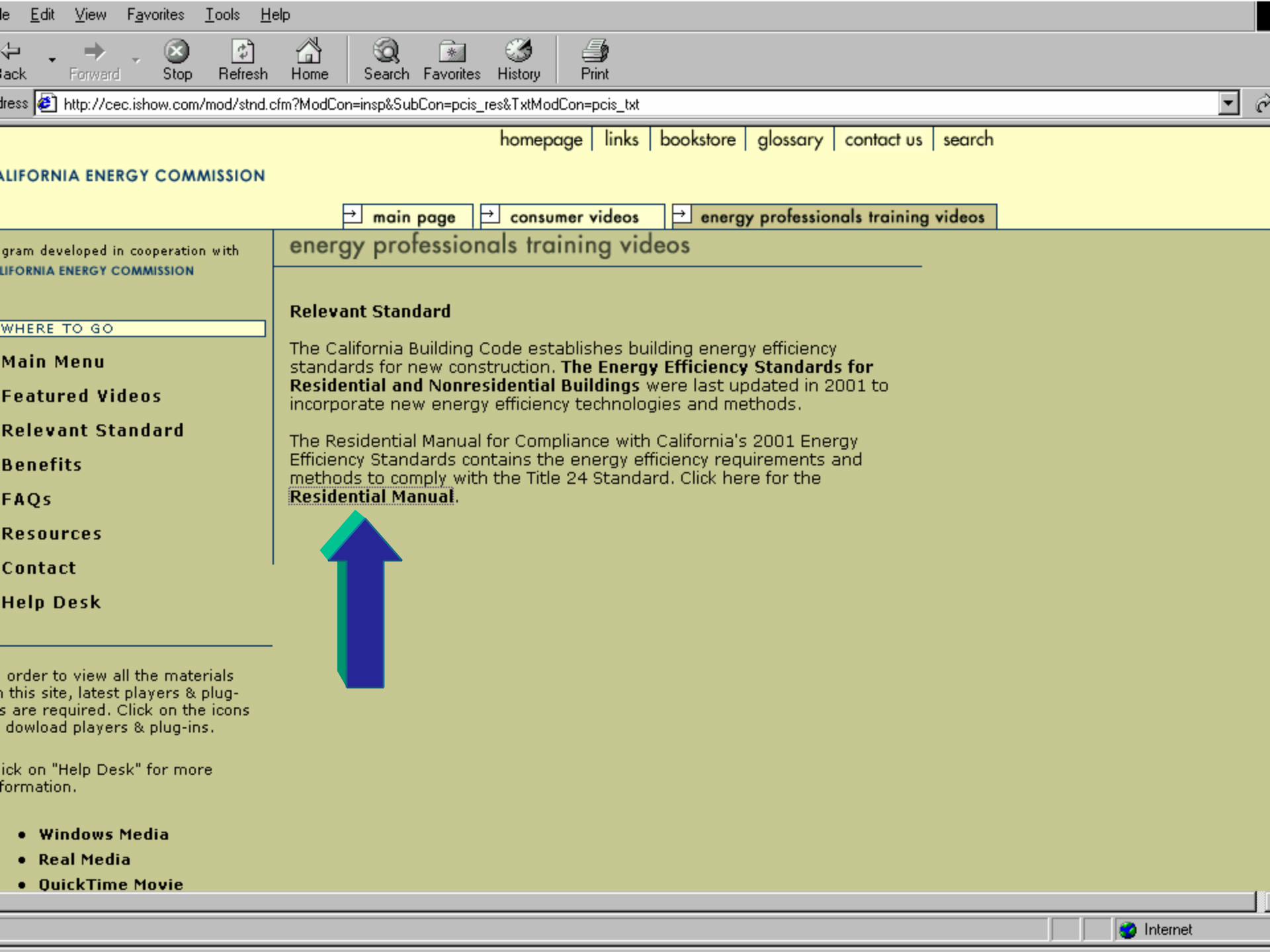
CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 1

ARTICLE 1—ENERGY BUILDING REGULATIONS

SECTION 10-101 – SCOPE

- (a) This article contains administrative regulations relating to the energy building regulations in Title 24, Part 6. This article applies to all residential and nonresidential buildings.
- (b) Nothing in this article lessens any necessary qualifications or responsibilities of licensed or registered building professionals or other designers or builders, or the duties of enforcement agencies that exist under state or local law.

NOTE: Authority cited: Sections 25402 and 25402.1, Public Resources Code. Reference: Sections 25402 and 25402.1, Public Resources Code.



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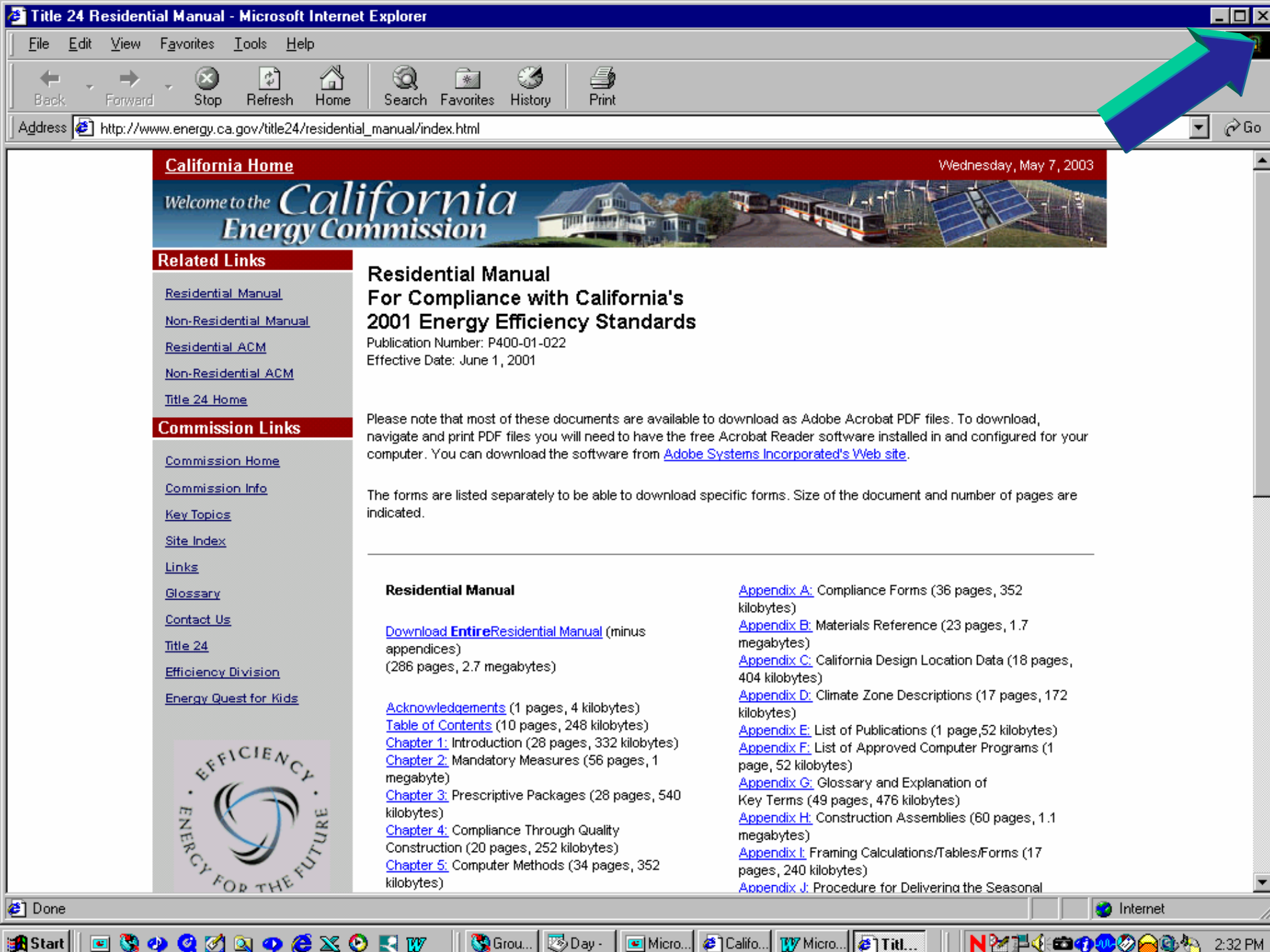
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- [Non-Residential Manual](#)
- [Residential ACM](#)
- [Non-Residential ACM](#)
- [Title 24 Home](#)

Commission Links

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- [Glossary](#)
- [Contact Us](#)
- [Title 24](#)
- [Efficiency Division](#)
- [Energy Quest for Kids](#)

Residential Manual For Compliance with California's 2001 Energy Efficiency Standards

Publication Number: P400-01-022

Effective Date: June 1, 2001

Please note that most of these documents are available to download as Adobe Acrobat PDF files. To download, navigate and print PDF files you will need to have the free Acrobat Reader software installed in and configured for your computer. You can download the software from [Adobe Systems Incorporated's Web site](#).

The forms are listed separately to be able to download specific forms. Size of the document and number of pages are indicated.

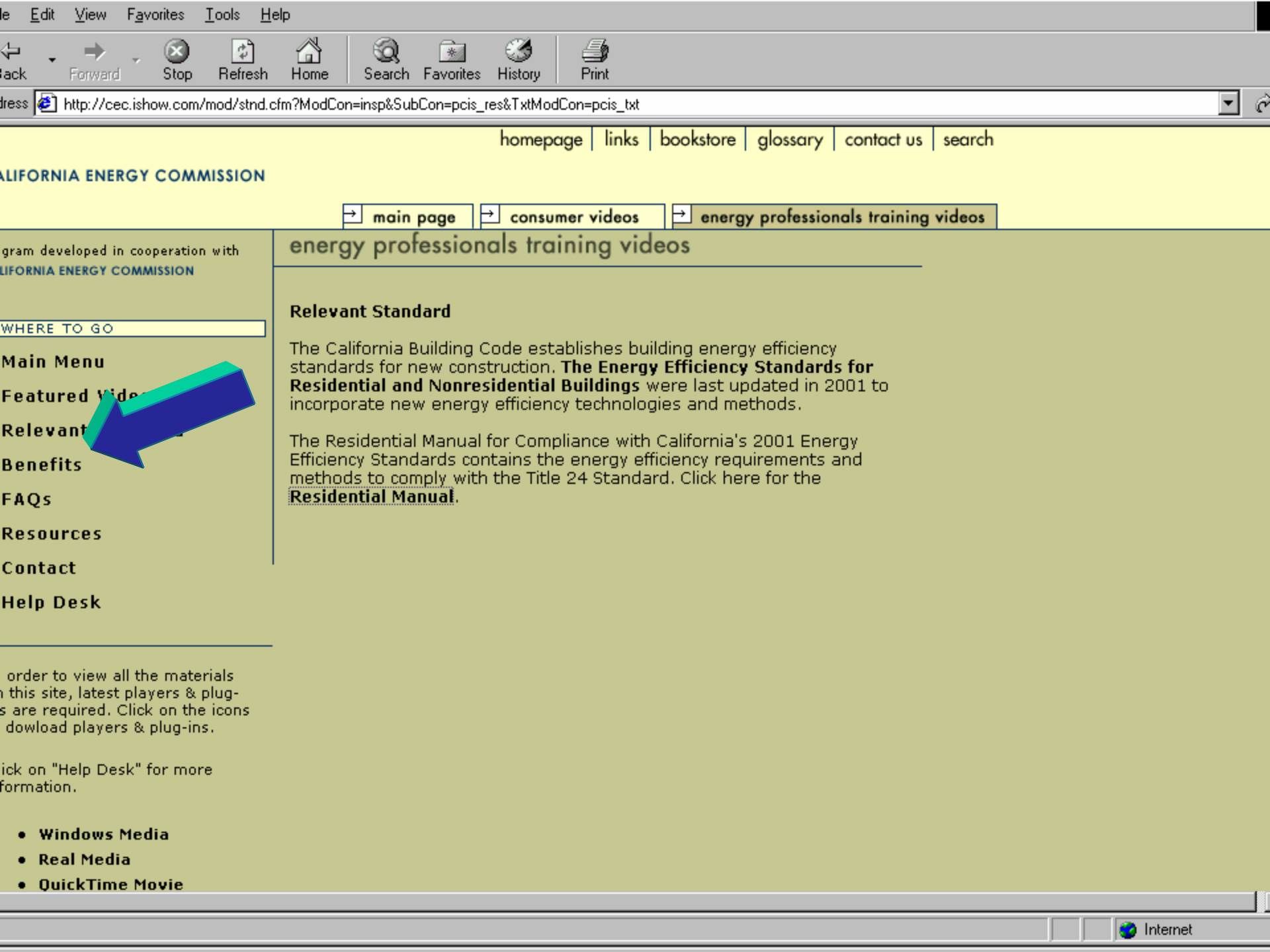
Residential Manual

[Download Entire Residential Manual](#) (minus appendices)
(286 pages, 2.7 megabytes)

- [Acknowledgements](#) (1 pages, 4 kilobytes)
- [Table of Contents](#) (10 pages, 248 kilobytes)
- [Chapter 1:](#) Introduction (28 pages, 332 kilobytes)
- [Chapter 2:](#) Mandatory Measures (56 pages, 1 megabyte)
- [Chapter 3:](#) Prescriptive Packages (28 pages, 540 kilobytes)
- [Chapter 4:](#) Compliance Through Quality Construction (20 pages, 252 kilobytes)
- [Chapter 5:](#) Computer Methods (34 pages, 352 kilobytes)

- [Appendix A:](#) Compliance Forms (36 pages, 352 kilobytes)
- [Appendix B:](#) Materials Reference (23 pages, 1.7 megabytes)
- [Appendix C:](#) California Design Location Data (18 pages, 404 kilobytes)
- [Appendix D:](#) Climate Zone Descriptions (17 pages, 172 kilobytes)
- [Appendix E:](#) List of Publications (1 page, 52 kilobytes)
- [Appendix F:](#) List of Approved Computer Programs (1 page, 52 kilobytes)
- [Appendix G:](#) Glossary and Explanation of Key Terms (49 pages, 476 kilobytes)
- [Appendix H:](#) Construction Assemblies (60 pages, 1.1 megabytes)
- [Appendix I:](#) Framing Calculations/Tables/Forms (17 pages, 240 kilobytes)
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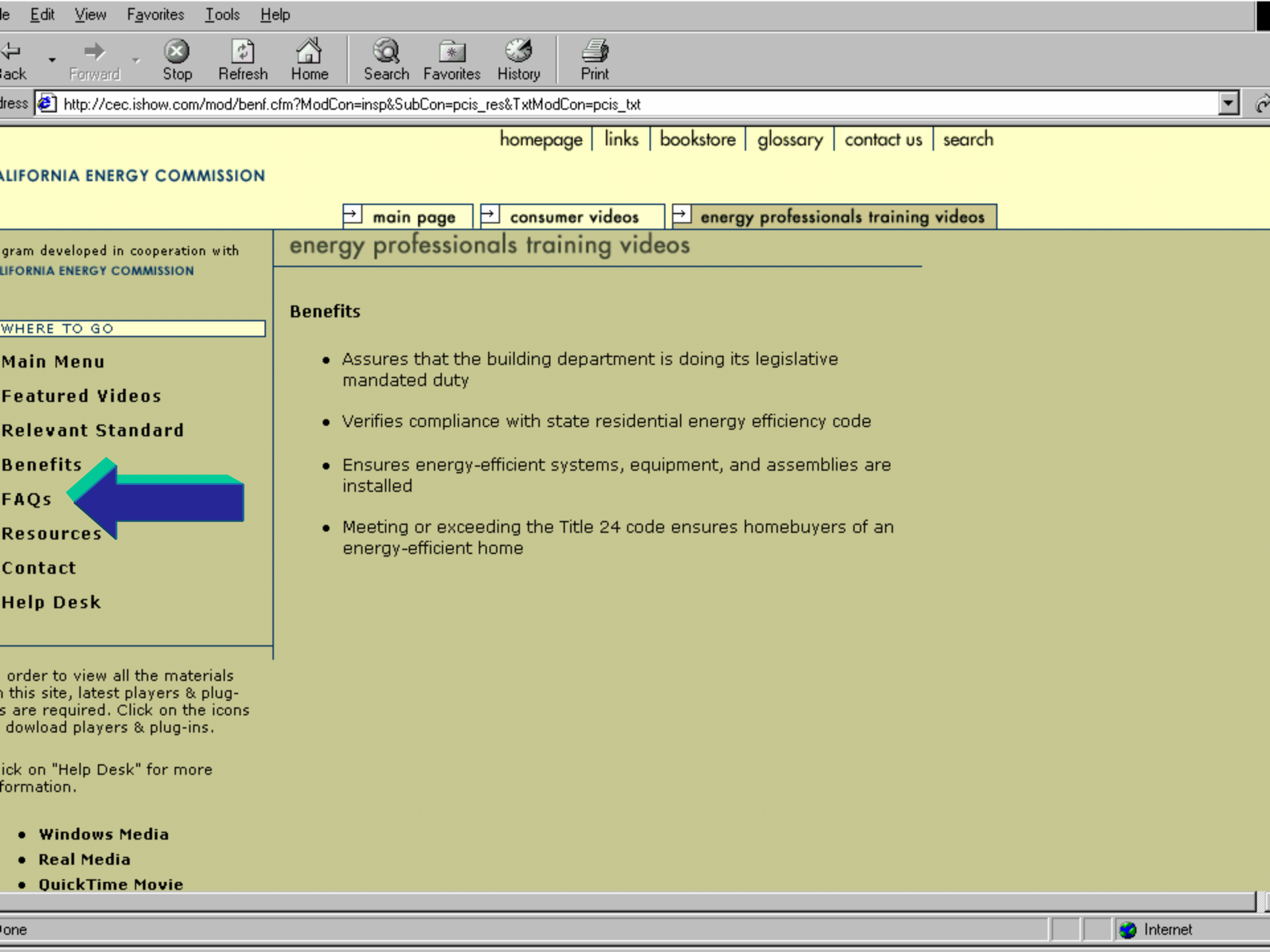
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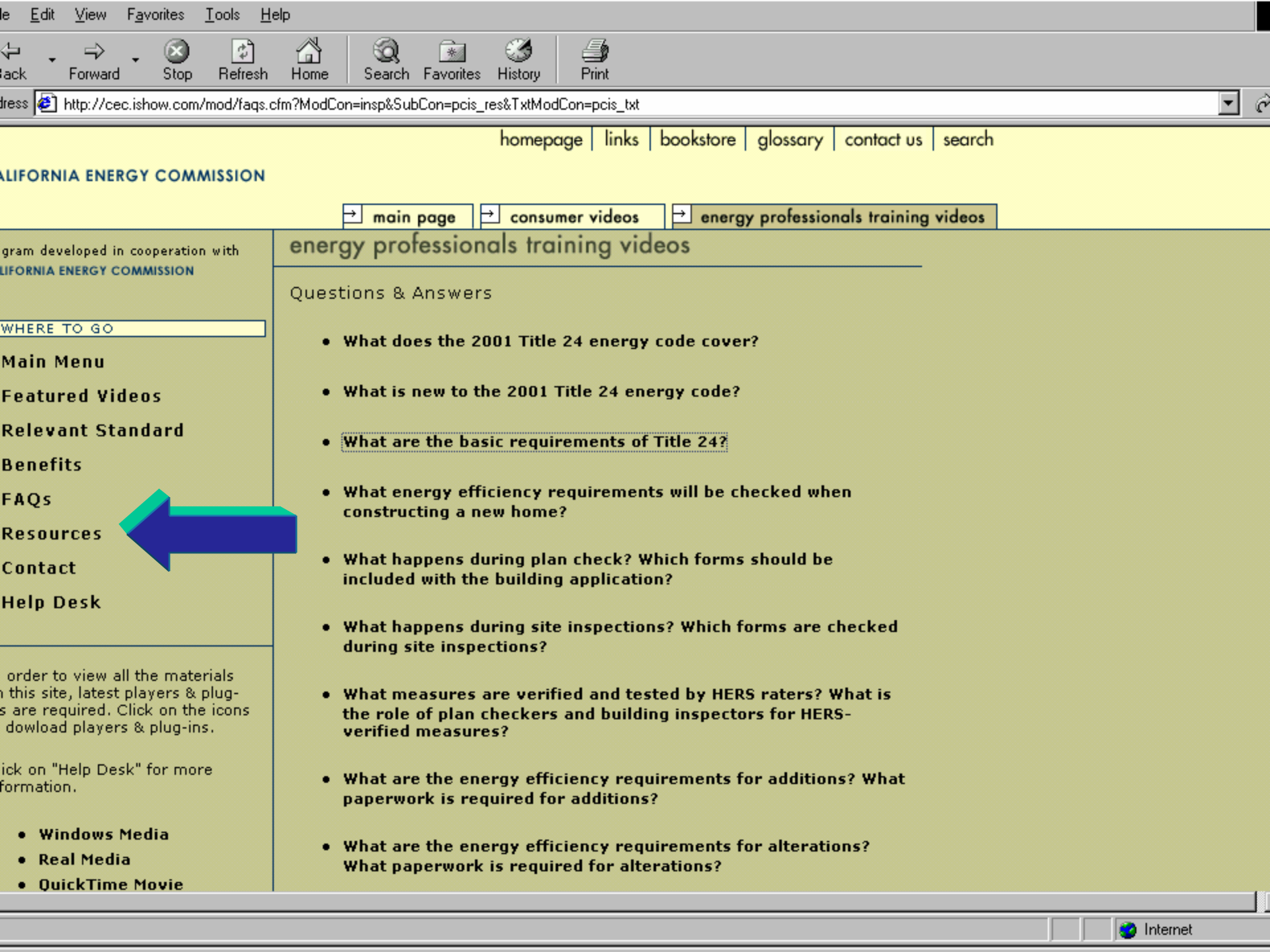
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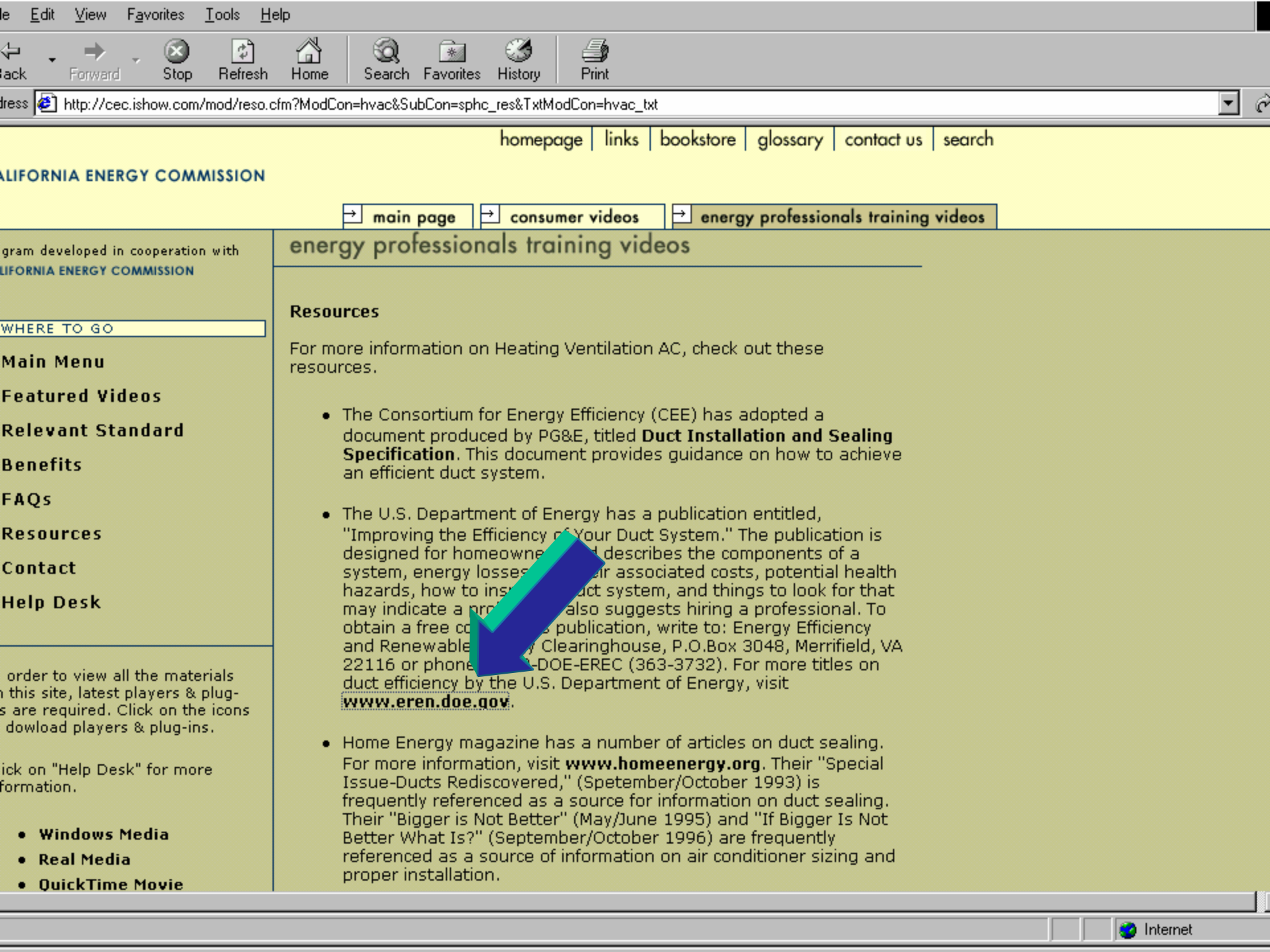
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Questions & Answers

- [What does the 2001 Title 24 energy code cover?](#)
- [What is new to the 2001 Title 24 energy code?](#)
- [What are the basic requirements of Title 24?](#)
- [What energy efficiency requirements will be checked when constructing a new home?](#)
- [What happens during plan check? Which forms should be included with the building application?](#)
- [What happens during site inspections? Which forms are checked during site inspections?](#)
- [What measures are verified and tested by HERS raters? What is the role of plan checkers and building inspectors for HERS-verified measures?](#)
- [What are the energy efficiency requirements for additions? What paperwork is required for additions?](#)
- [What are the energy efficiency requirements for alterations? What paperwork is required for alterations?](#)



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Resources

For more information on Heating Ventilation AC, check out these
resources.

- The Consortium for Energy Efficiency (CEE) has adopted a document produced by PG&E, titled **Duct Installation and Sealing Specification**. This document provides guidance on how to achieve an efficient duct system.
- The U.S. Department of Energy has a publication entitled, "Improving the Efficiency of Your Duct System." The publication is designed for homeowners and describes the components of a system, energy losses, their associated costs, potential health hazards, how to install a duct system, and things to look for that may indicate a problem. It also suggests hiring a professional. To obtain a free copy of this publication, write to: Energy Efficiency and Renewable Energy Clearinghouse, P.O.Box 3048, Merrifield, VA 22116 or phone 1-800-DOE-EREC (363-3732). For more titles on duct efficiency by the U.S. Department of Energy, visit www.eren.doe.gov.
- Home Energy magazine has a number of articles on duct sealing. For more information, visit www.homeenergy.org. Their "Special Issue-Ducts Rediscovered," (September/October 1993) is frequently referenced as a source for information on duct sealing. Their "Bigger is Not Better" (May/June 1995) and "If Bigger Is Not Better What Is?" (September/October 1996) are frequently referenced as a source of information on air conditioner sizing and proper installation.



U.S. Department of Energy

Energy Efficiency and Renewable Energy

*Bringing you a prosperous future where energy is
clean, abundant, reliable, and affordable*



Energy Information Portal

A gateway to hundreds of Web sites and thousands of online documents on energy efficiency and renewable energy

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- Geothermal
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- Hydropower
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► Building Technologies Program

► Distributed Energy & Electric Reliability Program

► Federal Energy Management Program

► FreedomCAR & Vehicle Technologies Program

► Geothermal Technologies Program

► Hydrogen, Fuel Cells & Infrastructure Technologies Program

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■ NEWS

Six High Schools Win the Hydrogen Fuel Cell Model Challenge

May 03, 2003

DOE Funds Eight Native American Tribes to Develop Renewable Energy

April 24, 2003

DOE Office Facility in Maryland Earns the Energy Star Label

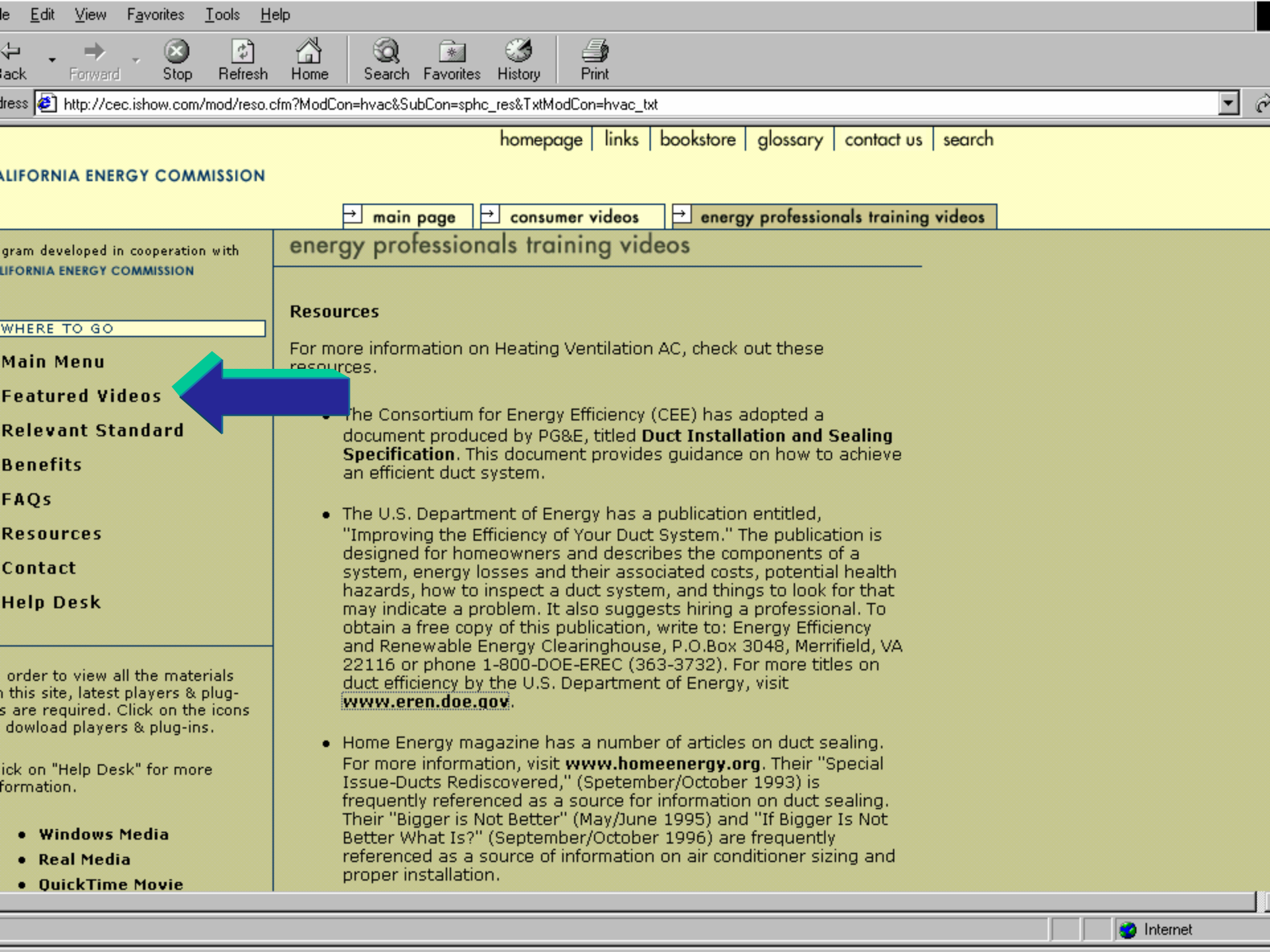
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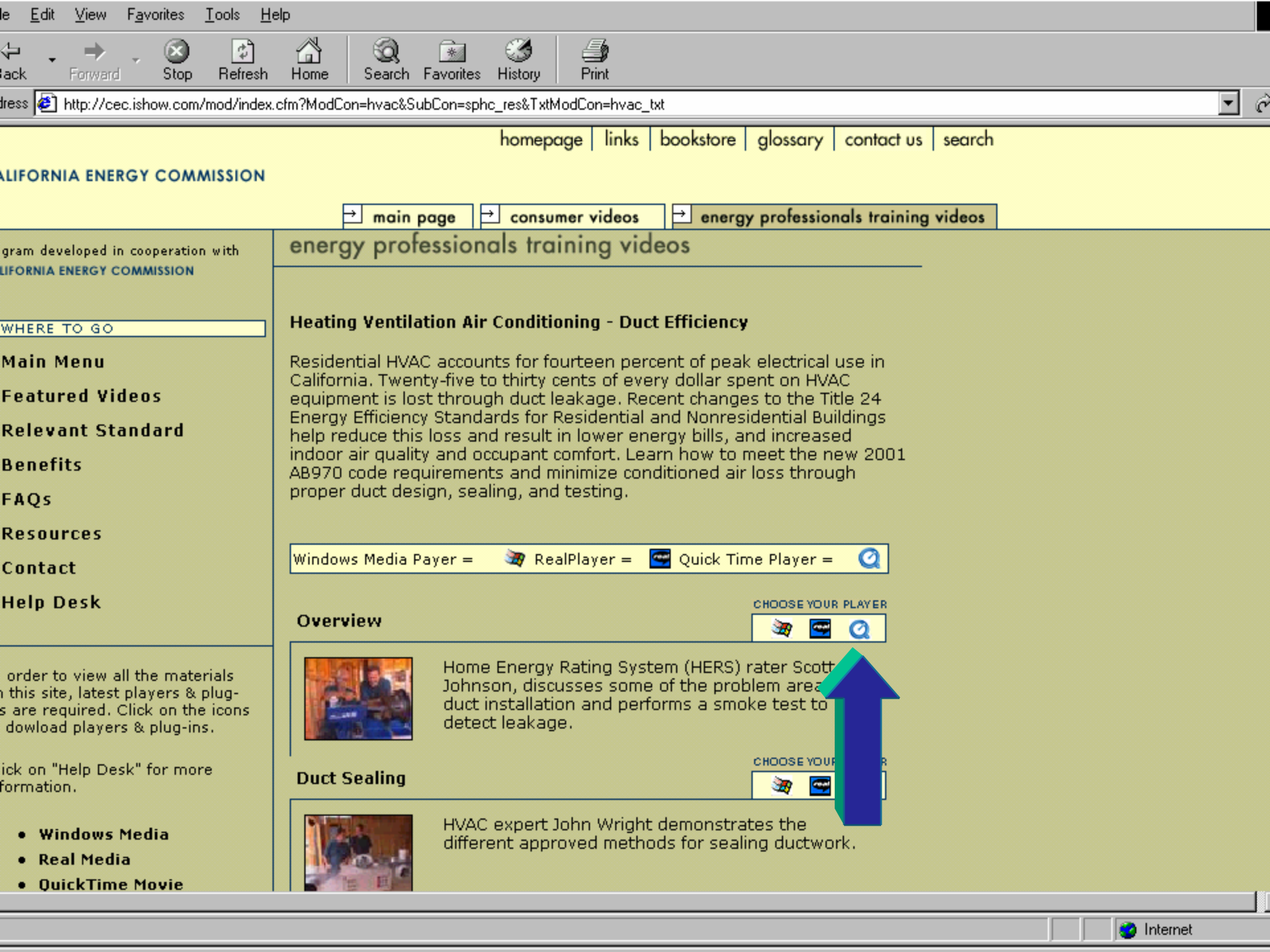
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Heating Ventilation Air Conditioning - Duct Efficiency

Residential HVAC accounts for fourteen percent of peak electrical use in California. Twenty-five to thirty cents of every dollar spent on HVAC equipment is lost through duct leakage. Recent changes to the Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings help reduce this loss and result in lower energy bills, and increased indoor air quality and occupant comfort. Learn how to meet the new 2001 AB970 code requirements and minimize conditioned air loss through proper duct design, sealing, and testing.

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Overview

CHOOSE YOUR PLAYER



Home Energy Rating System (HERS) rater Scott Johnson, discusses some of the problem areas of duct installation and performs a smoke test to detect leakage.

Duct Sealing

CHOOSE YOUR PLAYER



HVAC expert John Wright demonstrates the different approved methods for sealing ductwork.

Overview



Home Energy Rating System (HERS) rater Scott Johnson, discusses some of the problem areas in duct installation and performs a smoke test to detect leakage.

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>>>> CLOSE WINDOW

California. Twenty-five percent of every dollar spent on HVAC equipment is lost through duct leakage. Recent changes to the Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings help reduce this loss and result in lower energy bills, and increased indoor air quality and occupant comfort. Learn how to meet the new 2001 AB970 code requirements and minimize conditioned air loss through proper duct design, sealing, and testing.

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HVAC expert John Wright demonstrates the different approved methods for sealing ductwork.

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Overview



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- Print Target
- Cut
- Copy
- Copy Shortcut
- Paste
- Add to Favorites...
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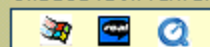
equipment is lost through duct leakage. Energy Efficiency Standards (Title 24) help reduce this loss and reduce indoor air quality and occupant health. AB970 code requirements are proper duct design, sealing,

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use in
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Residential Buildings
and increased
to meet the new 2001
air loss through

Time Player =

CHOOSE YOUR PLAYER

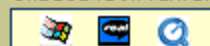


Overview



Home Energy Rating System (HERS) rater Scott Johnson, discusses some of the problem areas in duct installation and performs a smoke test to detect leakage.

CHOOSE YOUR PLAYER



Duct Sealing



HVAC expert John Wright demonstrates the different approved methods for sealing ductwork.

order to view all the materials on this site, latest players & plug-ins are required. Click on the icons to download players & plug-ins.

Click on "Help Desk" for more information.

- Windows Media
- Real Media
- QuickTime Movie



By the Numbers

- **Reaching Many Hundreds Each Day**
- **Complements On-Site Training**
- **Per Month**
 - **8,000 Total Hits**
 - **4,000 Total Plays**
 - **\$0.50 cost per play (Streaming)**



Cost Per Segment

- **Varies**
- **Sponsorship**
- **Very Cost Effective**
- **Convenient**
- **Entertaining**
- **Informative**



Funding

- **30% Private Sector**
- **70% Public Funding**



Tips

- **Host like Steve Easley**
 - **Knowledgeable**
 - **Script Outlines**
 - **Great On-Camera Presence**
- **Facilitator & Producer Director**
 - **Coordinates Shoots & Contracts**
 - **Directs & Produces**



More Tips

- **Great Teamwork + Trustworthy**
 - **Steve Easley (Building Media, Inc.)**
 - **Darren Harris, Phil de Marne, Craig Savage (Building Media, Inc.)**
 - **iShow.com, D&R International**
- **Government Contract Manager with “YES” Authority**



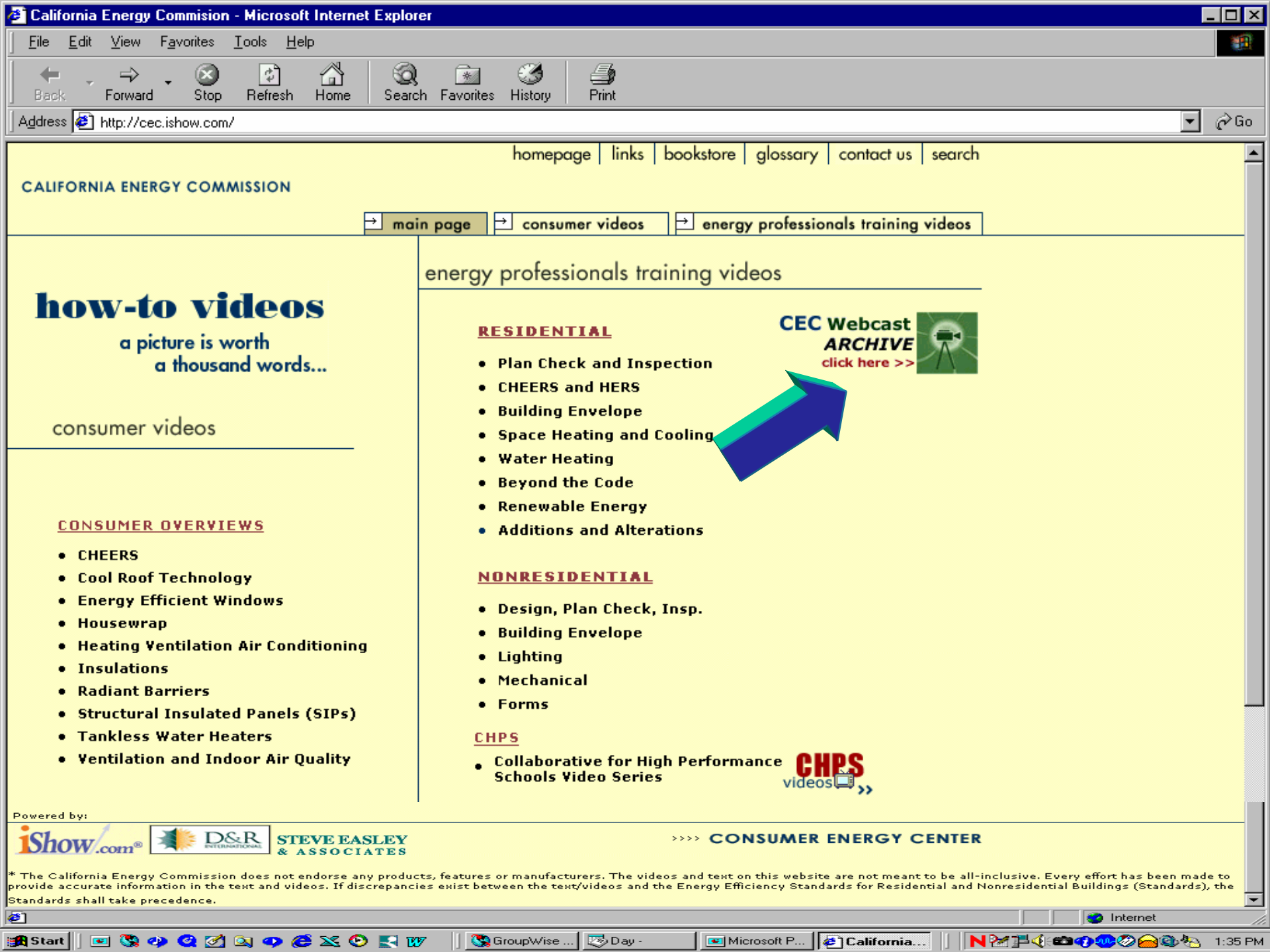
Even More Tips

- **Private Sector Sponsorship**
 - **No Commercials Allowed**
 - **Allow Repurpose w/Exceptions**
 - **Provide “Disclaimer”**
- **Once Removed from Main Public Web Site**
 - **“Consumer Energy Center”**
 - **Commission’s Official Public/Private Partnership**

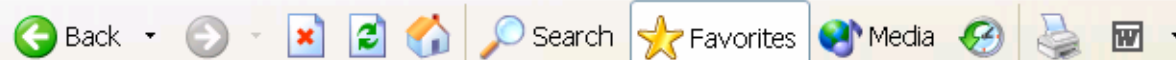


Webcast

- **January 15, 2003**
- **Interactive - Distance Learning**
 - **2 “Tests” Given/Auto-Corrected and Received**
 - **Continuing Ed. Credit from CALBO**
- **300 Computers Online - Live**
 - **1,000 or More Total Viewers**
 - **Archived @ www.energyvideos.com**
- **Note: The following Virtual Tour is not in the Live Presentation but is provided here for your use.**



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Address http://cec.ishow.com/webcastarchive.html

Favorites

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- Travel and Leisure
- AA History and Trivia 2...
- ameeting
- California Energy Com...
- CALIFORNIA ENERGY ...

CALIFORNIA ENERGY COMMISSION
JANUARY 15, 2003
LIVE WEBCAST *Archive*



CEC Webcast
of Energy Code Training

California Energy Commision Webcast

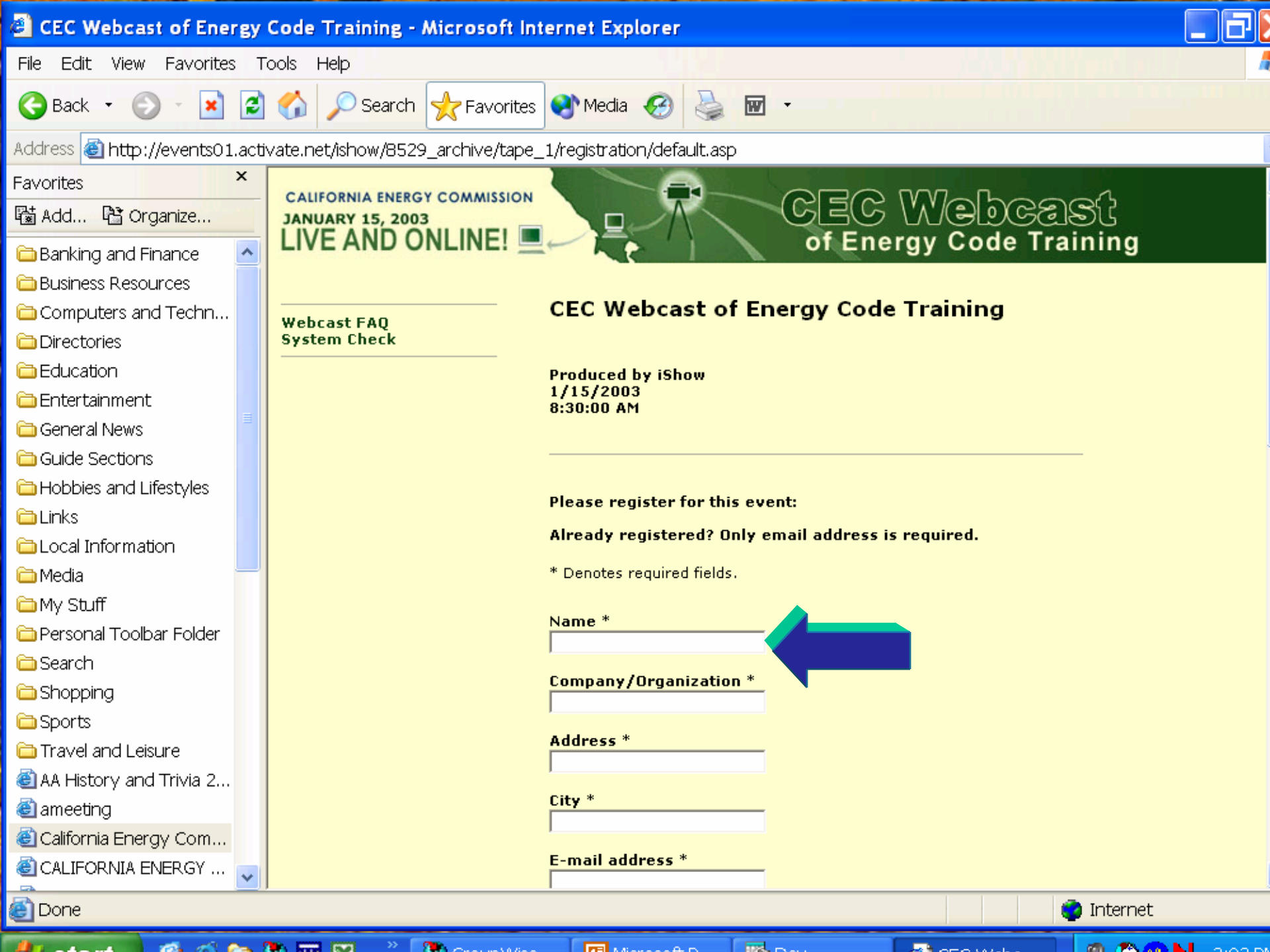
(Recorded on January 15, 2003)

Training on the 2001 Residential Energy Efficiency Standards

Click on the video segment group to sign in and watch the video. After signing in, you can select the video segment from the drop down menu.

	Title of Video Segment	Instructor	Length (approx.)
	1 Webcast Welcome	Steve Easley & others	25 minutes
	2 Overview 2001 Residential Standards - Major Changes	Douglas Beaman	1 hour
	3 HVAC, TXV, Refrig. Charge, Air Flow, and More	John Proctor	1 hour
	4 Plan Check - Overview	Douglas Beaman	1 hour
	5 Streaming videos		30 minutes
	6 CHEERS	Tom Hamilton & Scott Johnson	45 minutes
	7 Insulation	Rick Chitwood	1 hour
	8 Energy Inspection - Getting the Big Items	Douglas Beaman (no sound first 2 min.)	40 minutes
	9 Fenestration	Douglas Beaman	50 minutes
	10 Building Beyond the Code	Rob Hammon (no sound first 15 sec.)	40 minutes
	11 Overview of the 2005 Energy Efficiency Standards Proposals and Signing-Off the Webcast	John Eash & Steve Easley	10 minutes

Internet



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 - Travel and Leisure
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 - California Energy Com...
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[Webcast FAQ](#)
[System Check](#)

CEC Webcast of Energy Code Training

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Please register for this event:

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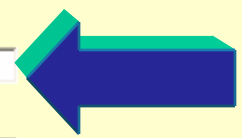
Name *

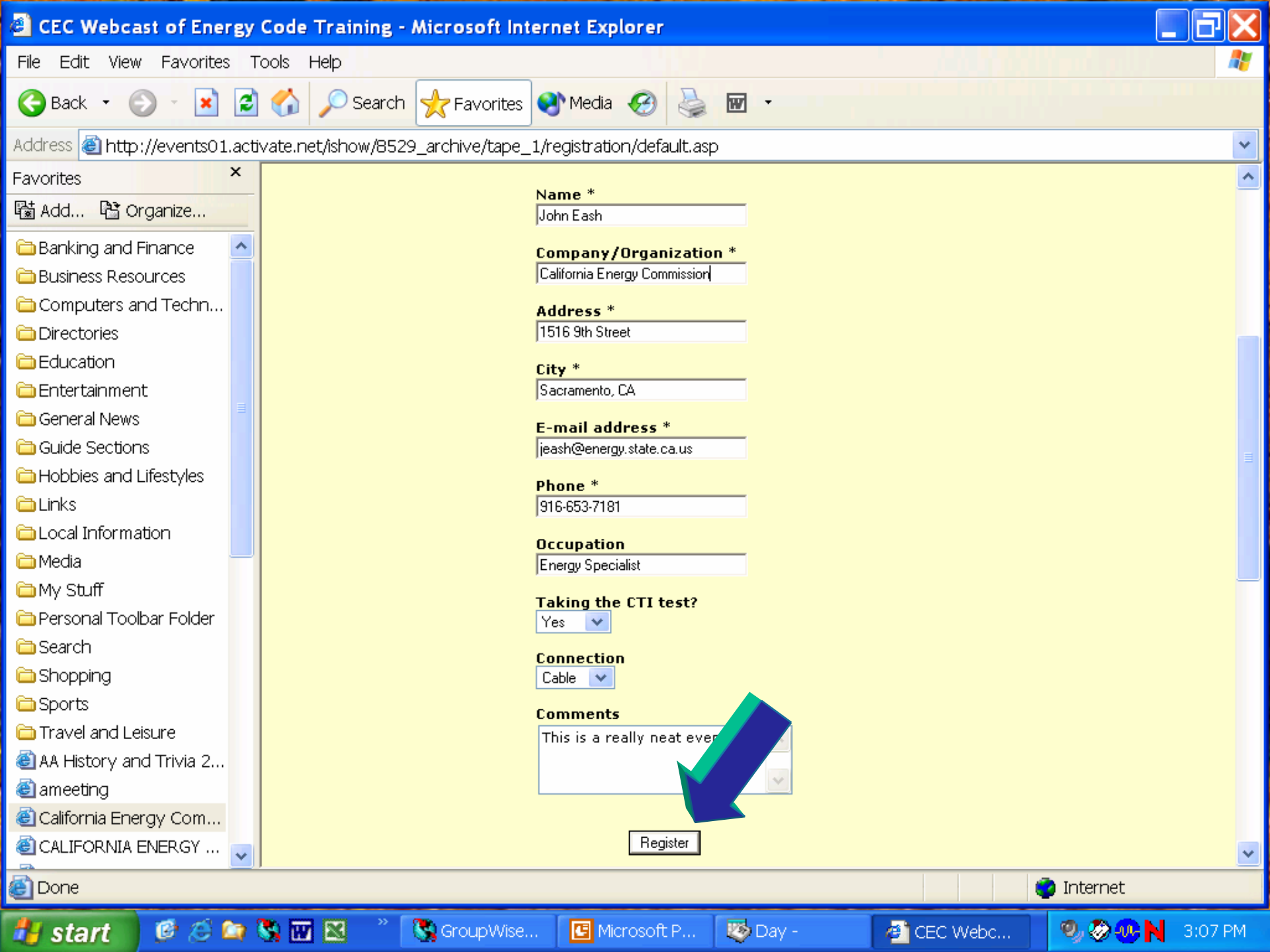
Company/Organization *

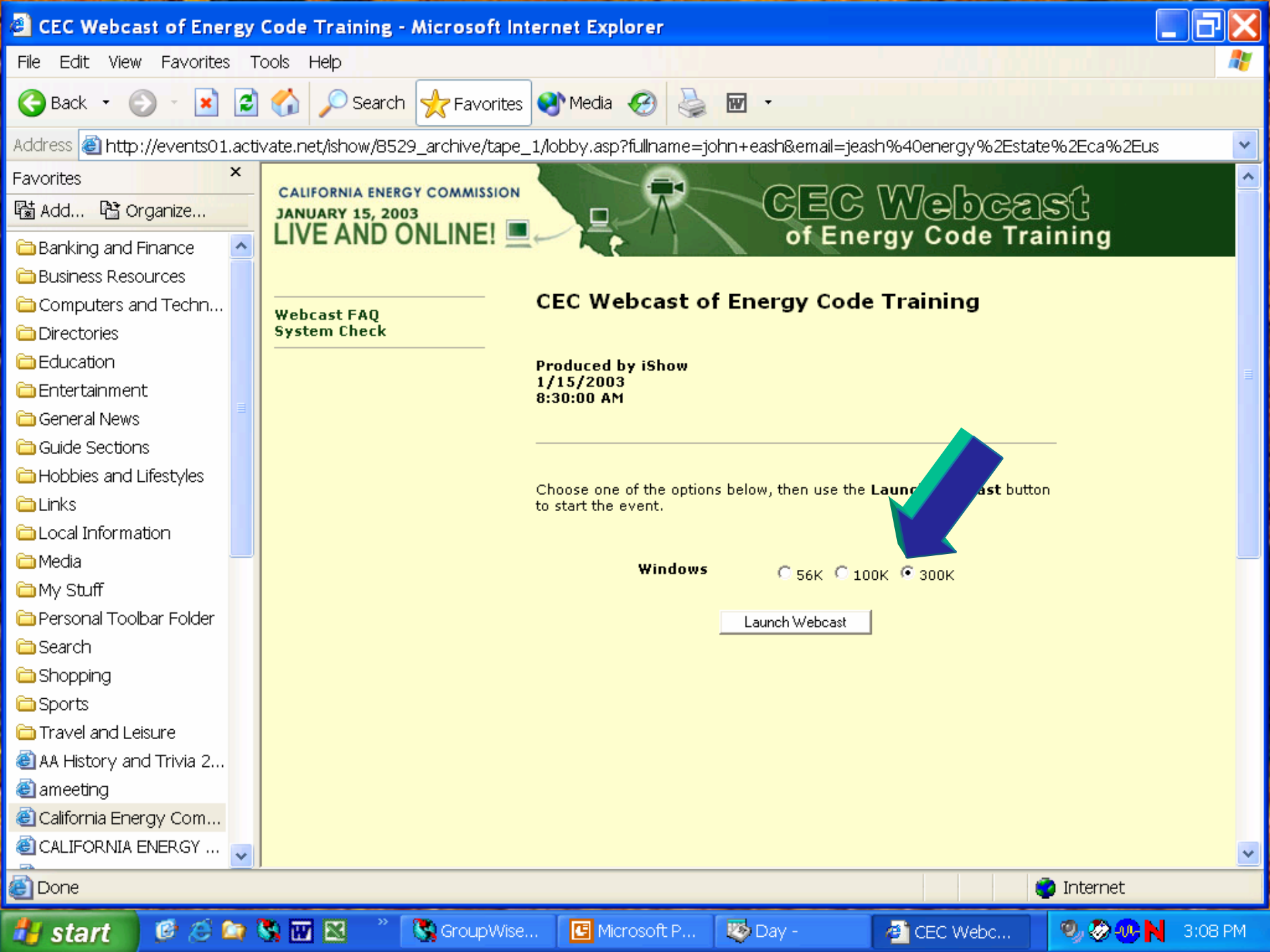
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California Energy Commision Webcast

(Recorded on January 15, 2003)

Training on the 2001 Residential Energy Efficiency Standards

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4	Plan Check - Overview	Douglas Beaman	1 hour
5	Streaming videos - Webcast	Various	30 minutes
6	Lunch Break - Prep for Afternoon Sessions		
7	CHEERS	Tom Hamilton & Scott Johnson	45 minutes
8	Insulation	Rick Chitwood	1 hour
9	Energy Inspection - Getting the Big Items	Douglas Beaman (no sound first 2 min.)	40 minutes
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Presentation Schedule

Windows

Email a Quick

Launch

56K

**Synchronized
PowerPoint**

6% Leakage

Five-ton system $400 \times 5 = 2000$ cfm

$2000 \times .06 = 120$ cfm

Maximum allowable leakage 120 cfm

Three-ton system $400 \times 3 = 1200$ cfm

$1200 \times .06 = 72$ cfm

Maximum allowable leakage 72 cfm

**Live
Video**

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Windows 56K

Email a Question

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Morning Test

Afternoon Test

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6% Leakage

Five-ton system $400 \times 5 = 2000$ cfm

$$2000 \times .06 = 120 \text{ cfm}$$

Maximum allowable leakage 120 cfm

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$$1200 \times .06 = 72 \text{ cfm}$$

Maximum allowable leakage 72 cfm

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Webcast FAQ
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Presentation Schedule

Windows 56K 100K 300K

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Ask a Question - Microsoft In...

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YOUR NAME:

YOUR EMAIL:

What does SHGC mean in this table? Did the Commission make this more stringent?

6	-	0.5	-	-
7	0.35	-	-	-
8	0.35	-	-	-
9	0.35	-	11	-
10	0.35	-	11	-
11	0.35	-	11	-
12	0.35	-	11	-
13	0.35	-	12	-
14	0.35	0.40	12	-
15	0.35	0.40	13	-
16	-	0.55	-	AFUE 90 / HSPF 7.6

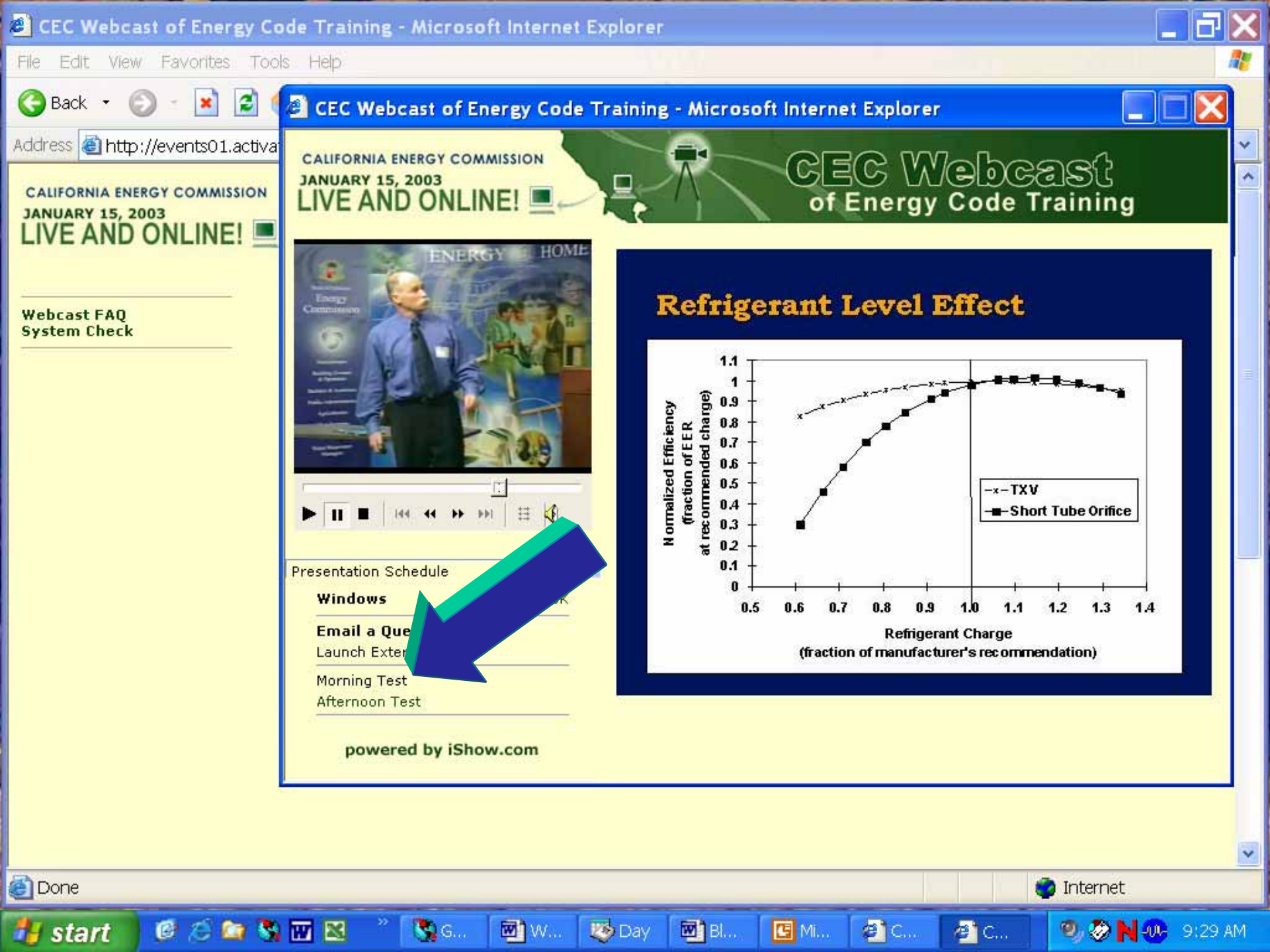


Internet

start



9:46 AM



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Presentation Schedule

Windows

Email a Question

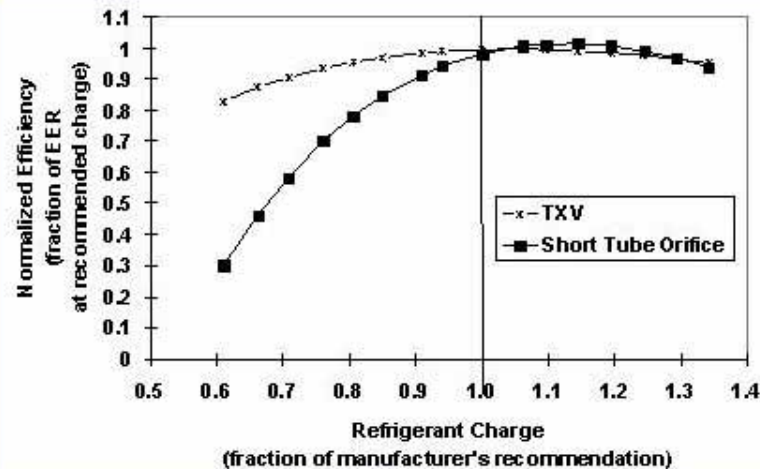
Launch External Site

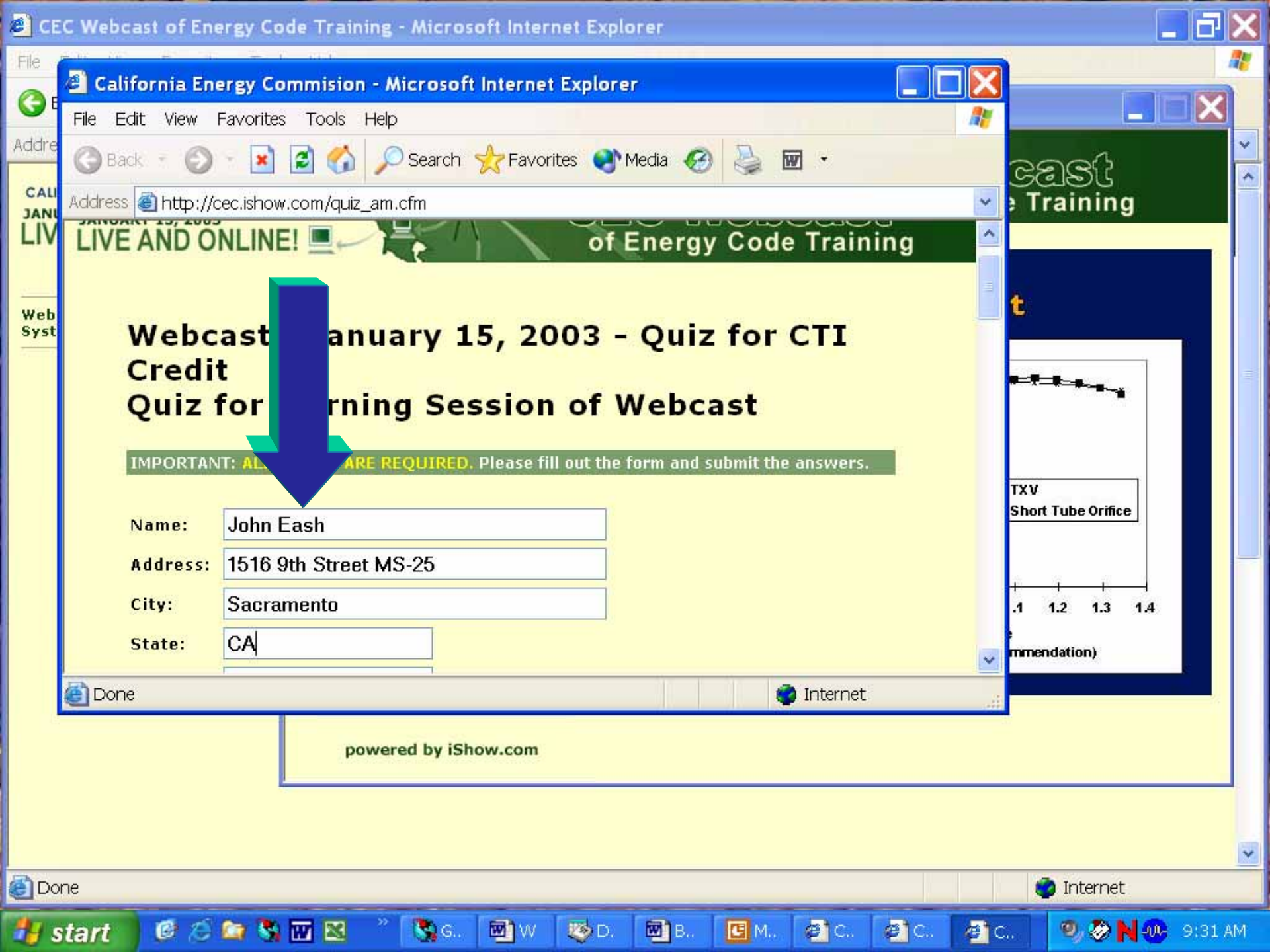
Morning Test

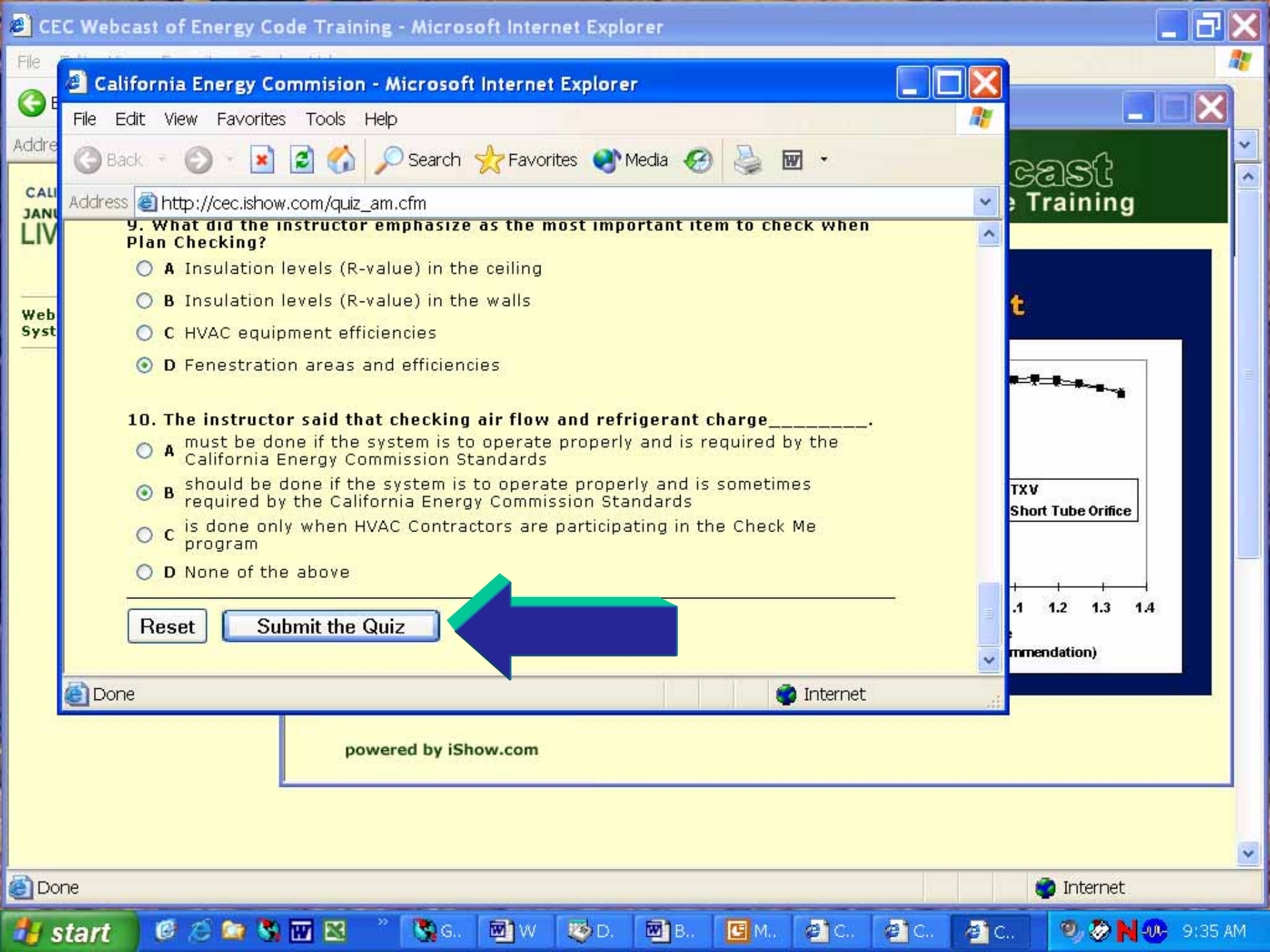
Afternoon Test

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Refrigerant Level Effect







California Energy Commission - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Reload Home Search Favorites Media

Address http://cec.ishow.com/quiz_am.cfm

9. What did the instructor emphasize as the most important item to check when Plan Checking?

- ☐ A Insulation levels (R-value) in the ceiling
- ☐ B Insulation levels (R-value) in the walls
- ☐ C HVAC equipment efficiencies
- ☒ D Fenestration areas and efficiencies

10. The instructor said that checking air flow and refrigerant charge_____.

- ☐ A must be done if the system is to operate properly and is required by the California Energy Commission Standards
- ☒ B should be done if the system is to operate properly and is sometimes required by the California Energy Commission Standards
- ☐ C is done only when HVAC Contractors are participating in the Check Me program
- ☐ D None of the above

Reset

Submit the Quiz

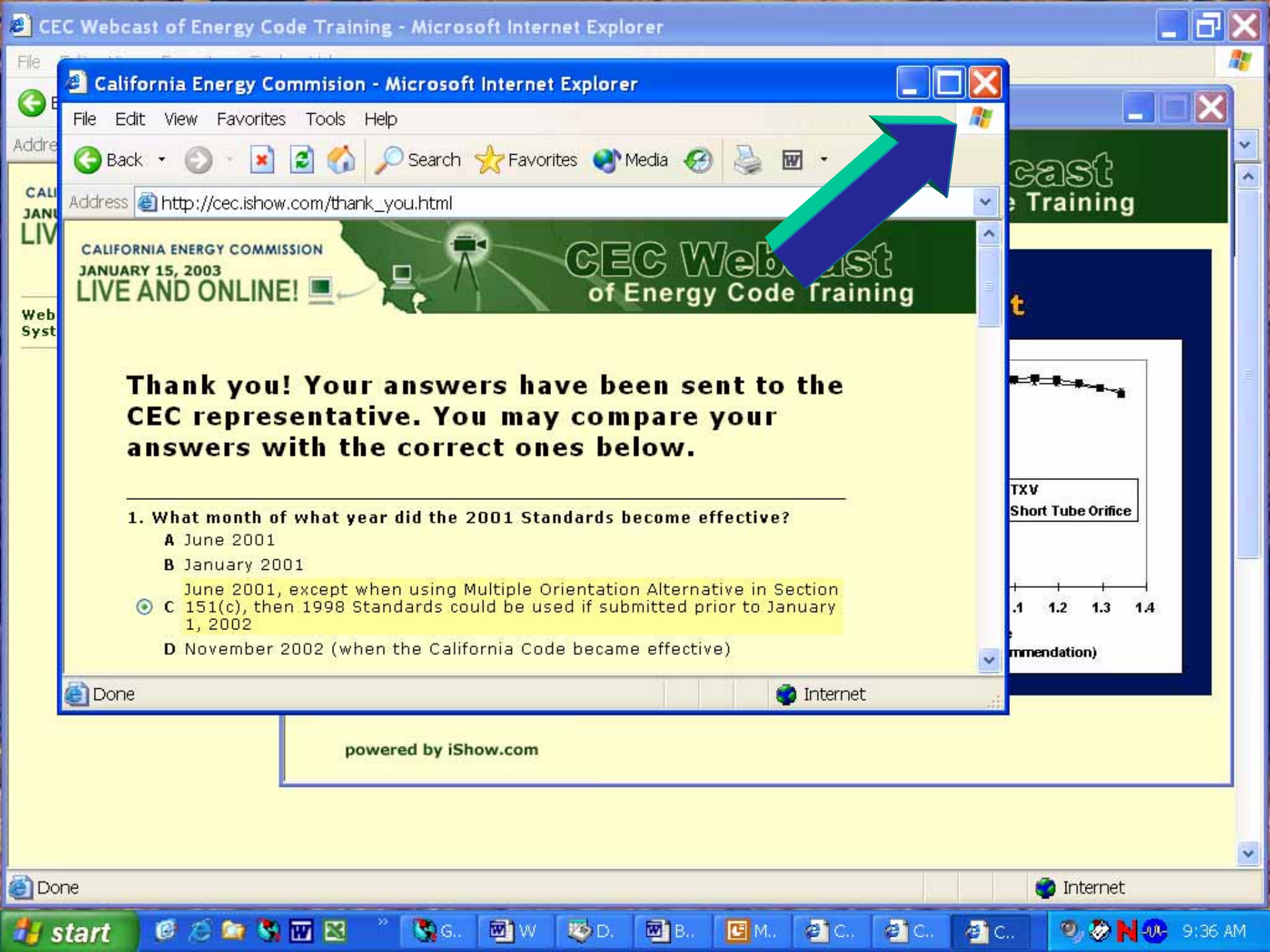
Done

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Done

Internet



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Thank you! Your answers have been sent to the CEC representative. You may compare your answers with the correct ones below.

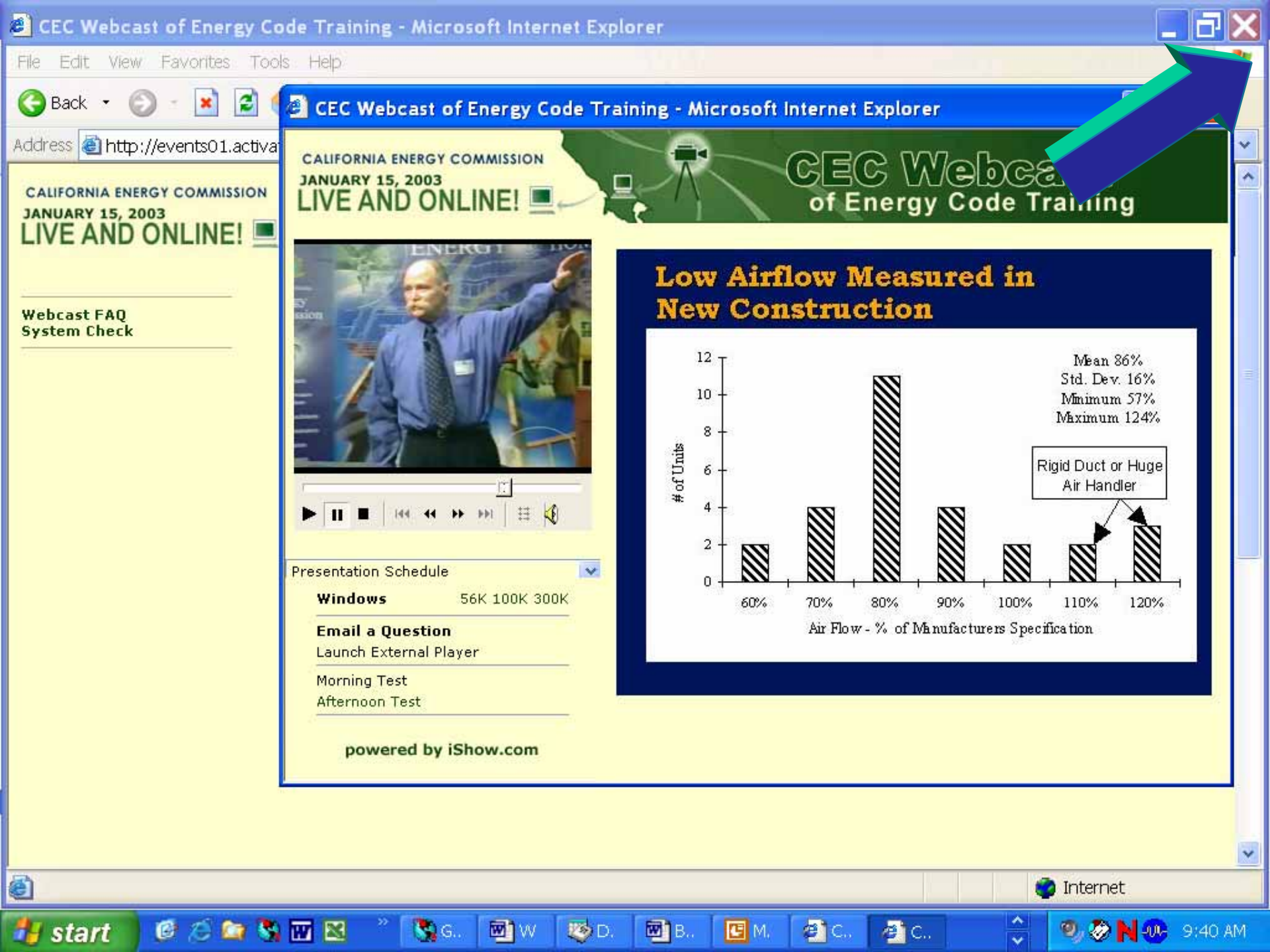
1. What month of what year did the 2001 Standards become effective?
- A June 2001
 - B January 2001
 - ☒ C June 2001, except when using Multiple Orientation Alternative in Section 151(c), then 1998 Standards could be used if submitted prior to January 1, 2002
 - D November 2002 (when the California Code became effective)

TXV
Short Tube Orifice

1.1 1.2 1.3 1.4

Recommendation)

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Webcast FAQ
System Check



Presentation Schedule

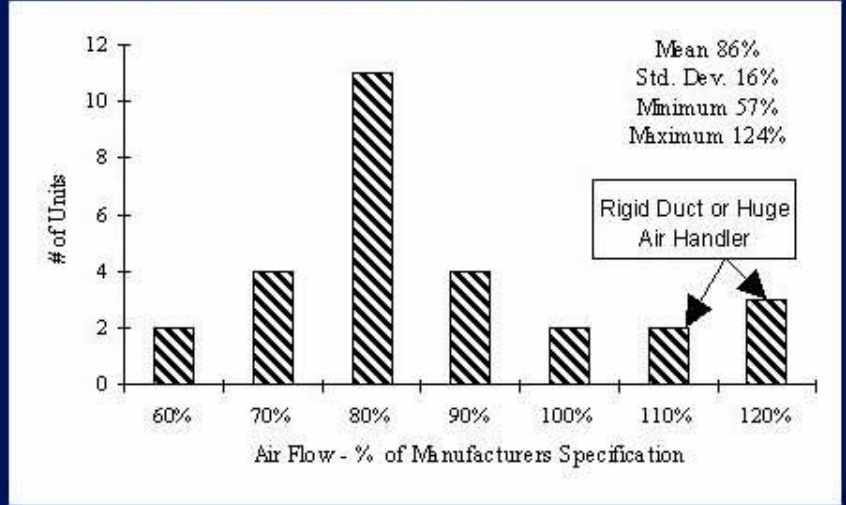
Windows 56K 100K 300K

Email a Question
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Morning Test
Afternoon Test

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Low Airflow Measured in New Construction





Webcast

- **Event Planning – Critical**
 - **Host Sites, Advance Planning, Good Instructors, Good Producer/Director**
- **Cost Effective**
 - **300 Computers with up to 1,000 watching**
- **Cost Can vary from \$10k to \$40k+**
- **January 15th Cost = \$40/Person Trained**



CHPS

- **Collaborative for High Performance Schools**
- **Division of State Architect (DSA)**
- **Provided \$58k funding**
- **Interagency Agreement**
- **Commission Coordinated 9 Videos for DSA**



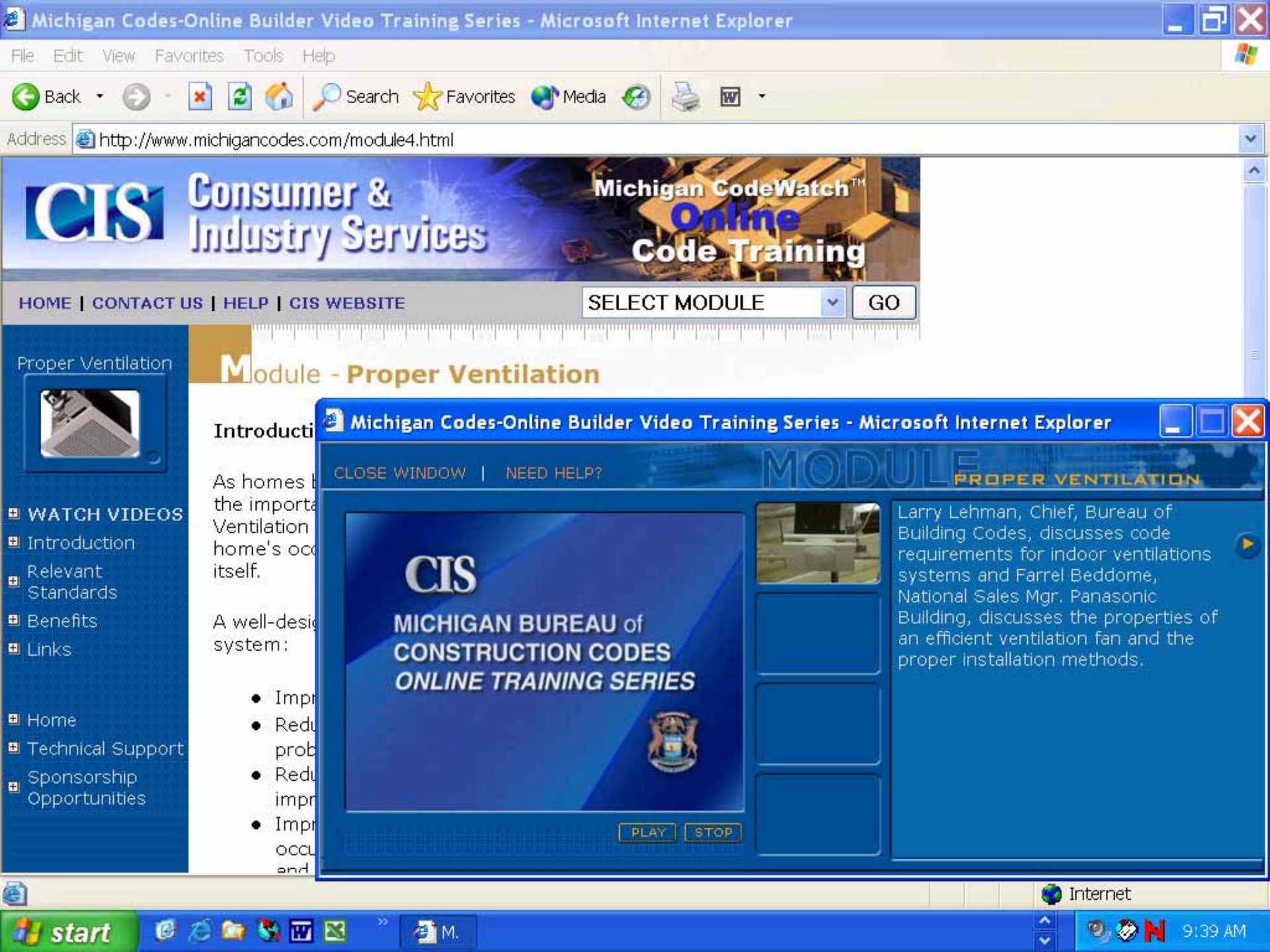
Video Hard Copies

- **Custom Copying and “Burning”**
 - **VHS Training Tapes**
 - **DVD’s**
 - **CD-Rom’s**



What's Next?

- **Michigan**
 - **Already Online with Production Co.**
 - **See www.buildingmedia.com**
 - **Online Videos Modeled after CA**
 - **Repurposing CA Videos Already**





Consumer & Industry Services

Michigan CodeWatch™ Online Code Training

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SELECT MODULE

GO

Proper Ventilation



WATCH VIDEOS

- Introduction
- Relevant Standards
- Benefits
- Links
- Home
- Technical Support
- Sponsorship Opportunities

Module - Proper Ventilation

Introduction

As homes become more energy efficient, the importance of proper ventilation in the home's overall energy efficiency becomes more apparent.

A well-designed ventilation system:

- Improves indoor air quality
- Reduces energy costs
- Reduces moisture problems
- Improves overall system efficiency

Michigan Codes-Online Builder Video Training Series - Microsoft Internet Explorer

CLOSE WINDOW | NEED HELP?

MODULE PROPER VENTILATION



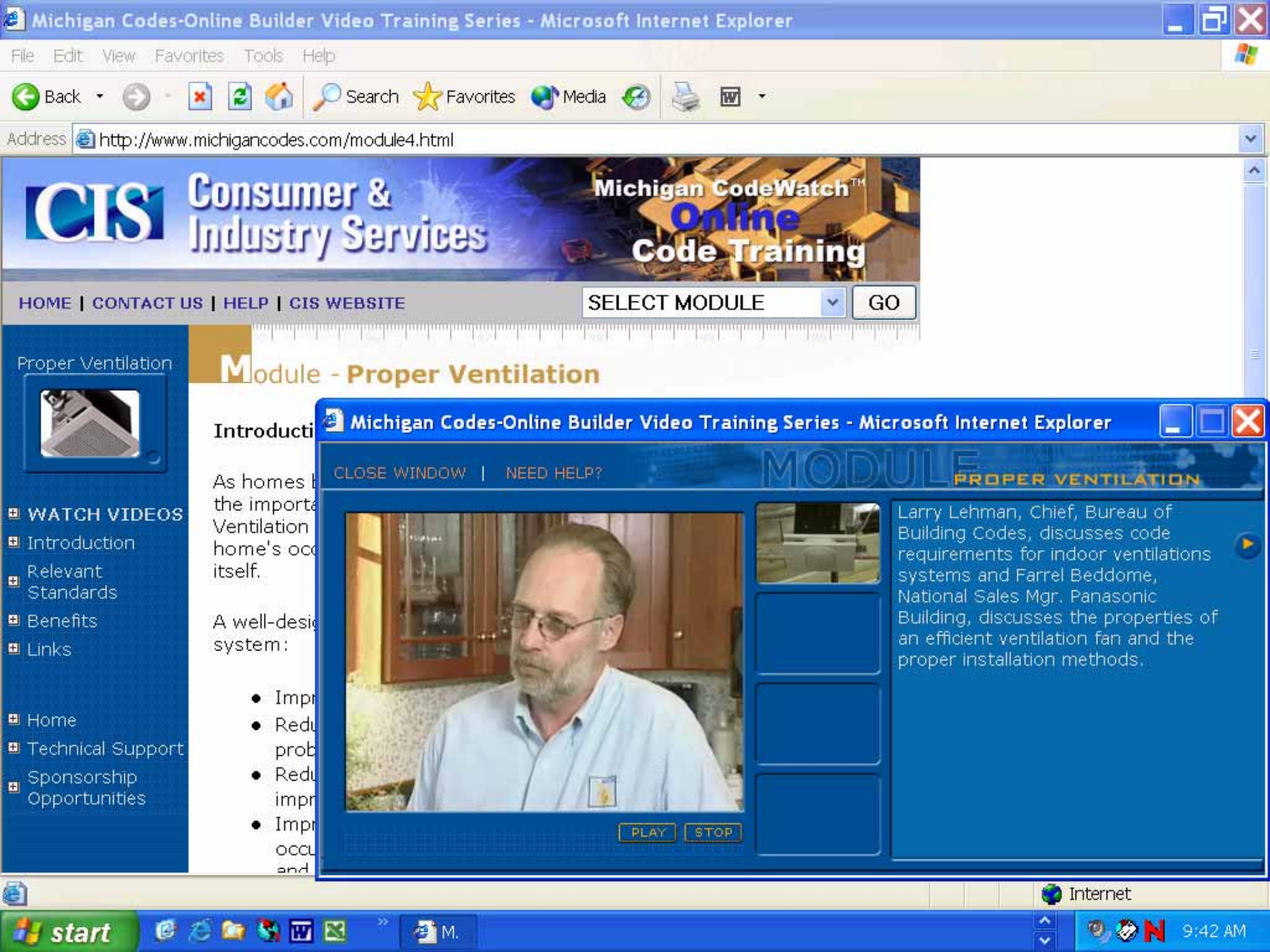
MICHIGAN BUREAU of CONSTRUCTION CODES ONLINE TRAINING SERIES



PLAY STOP



Larry Lehman, Chief, Bureau of Building Codes, discusses code requirements for indoor ventilations systems and Farrel Beddome, National Sales Mgr. Panasonic Building, discusses the properties of an efficient ventilation fan and the proper installation methods.



Consumer &
Industry Services

Michigan CodeWatch™
Online
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SELECT MODULE

GO

Proper Ventilation

Module - Proper Ventilation



Introduction

As homes become more energy efficient, the importance of proper ventilation in the home's overall energy efficiency becomes more apparent.

A well-designed ventilation system:

- Improves indoor air quality
- Reduces energy costs by removing moisture and pollutants
- Reduces the risk of mold and mildew
- Improves the overall health and comfort of the occupants

Michigan Codes-Online Builder Video Training Series - Microsoft Internet Explorer

CLOSE WINDOW | NEED HELP?

MODULE PROPER VENTILATION

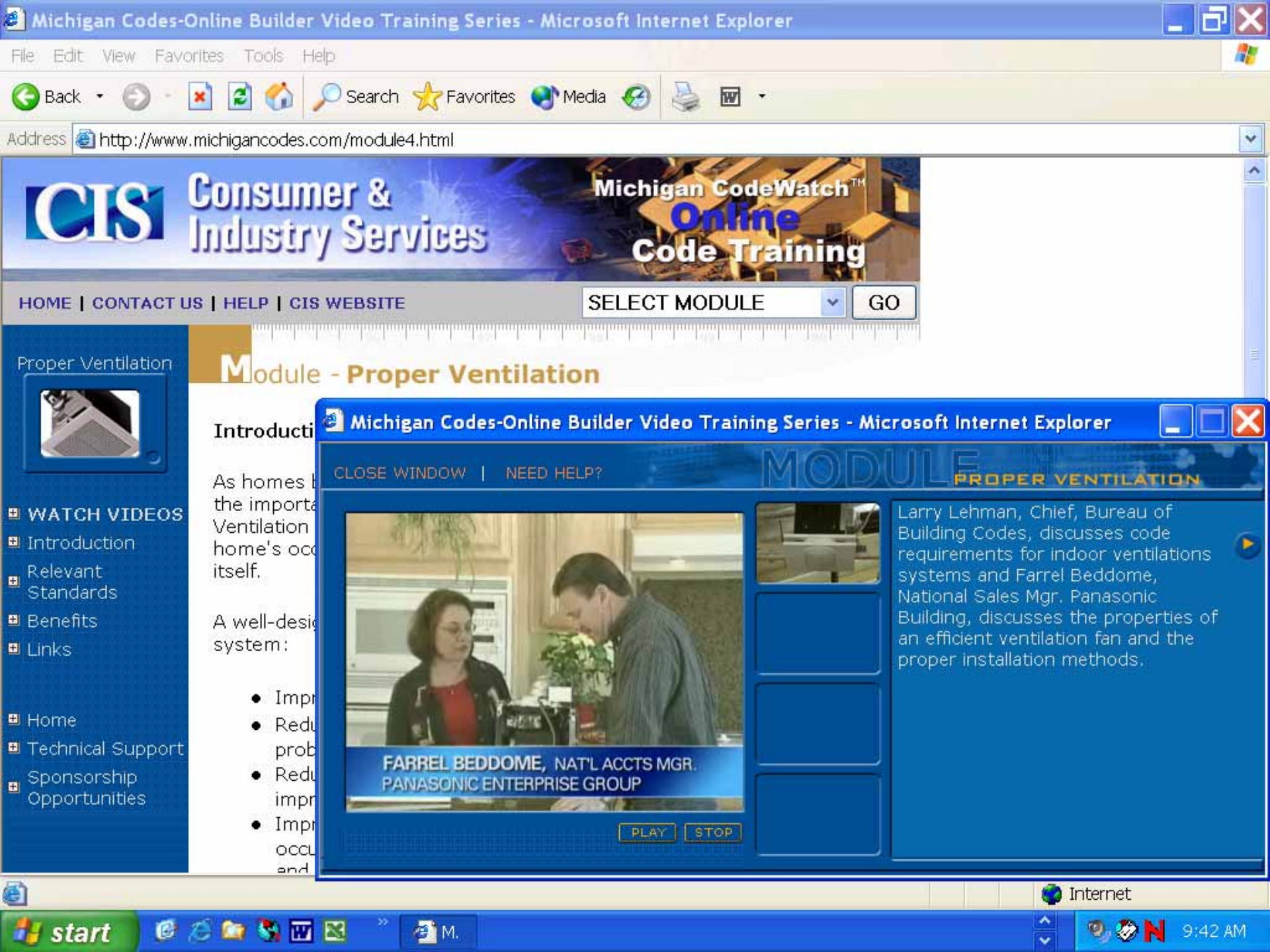


PLAY STOP



Larry Lehman, Chief, Bureau of Building Codes, discusses code requirements for indoor ventilations systems and Farrel Beddome, National Sales Mgr. Panasonic Building, discusses the properties of an efficient ventilation fan and the proper installation methods.

Internet





The Solution

- **Partner Together**
 - **Work with DOE to Establish National Interactive E-Training**
 - **Use California's Online Series as Starting Point**
 - **DOE and SEP Joint-Venture Proposals**



Next Steps

- **Start Now to Make 2004 the Year!!**
 - **Make a Decision**
 - **Work Together**
 - **Make Joint-Venture Proposals**
 - **Establish a National Training Web Site**
 - **MAKE MORE VIDEOS!**



For More Info

- **Contact**
 - **John Eash**
 - **California Energy Commission**
 - **916-653-7181**
 - **jeash@energy.state.ca.us**